

Service Manual

Car Audio

FM-AM-FM STEREO
CASSETTE DECK/TUNER/AMPLIFIER

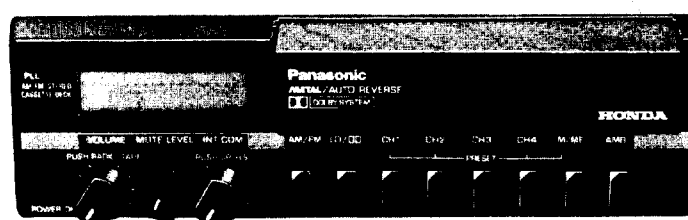
RM-1300E
(Black)

CUSTOM-MADE FOR HONDA



This is the Service Manual
for the following area.

Z ...For European.



Spare parts for this model have already been unable to supply.
However, we un-officially may supply a few items.
Please contact us regarding this matter.

■ SPECIFICATIONS

General

Power Source:	DC 12V (Negative ground only)
Test Voltage:	DC 14V
Power Consumption:	0.8A at maximum power output (Memory backup 0.5mA)
Dimensions:	208mm(W)×64mm(H)×144mm(D) (8 ³ / ₁₆ ×2 ⁹ / ₁₆ ×5 ¹¹ / ₁₆) without bracket
Weight:	1.7kg (3 lb 3/4 oz) without bracket

FM Tuner Section

Frequency Range:	87.5~108MHz
Usable Sensitivity:	8dB (S/N 30dB)
Signal to Noise Ratio:	55dB
Stereo Separation:	35dB at 1kHz
THD:	0.5%
IF Frequency:	10.7MHz

AM Tuner Section

Frequency Range:	522~1620kHz
Usable Sensitivity:	34dB (S/N 20dB)
Selectivity:	50dB (±10kHz)
IF Frequency:	450kHz

Cassette Deck Section

Tape System:	Auto-reverse
Wow & Flutter:	0.15% (WRMS)
Stereo Separation:	35dB at 1kHz

Intercom Section

Mike Input Impedance:	600Ω
Headphone Output:	0.5W (16Ω/CH)

*"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
Weights and dimensions shown are approximate.
Design and specifications are subject to change without notice.

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

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LOCATION OF CONTROLS AND COMPONENTS

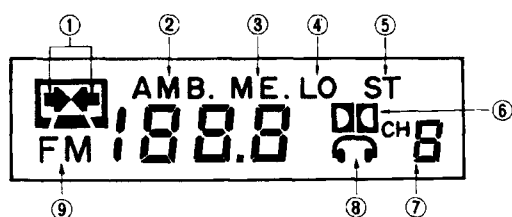


Fig. 1

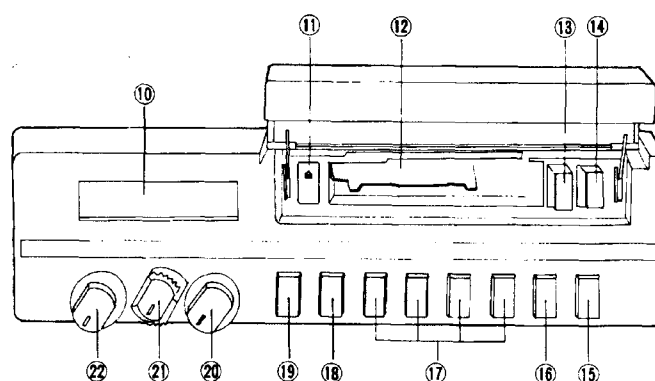


Fig. 2

- ① Direction Indicators
- ② Ambience Indicator
- ③ Metal/Memory Indicator
- ④ Local/DX Indicator
- ⑤ FM Stereo Indicator
- ⑥ Dolby Indicator
- ⑦ Preset CH Indicator
- ⑧ Headset Indicator
- ⑨ AM/FM Indicator
- ⑩ LCD Display
- ⑪ Eject Button
- ⑫ Tape Slot
- ⑬ Rewind Button

- ⑭ Fast Forward Button
- ⑮ Ambience Switch (ON/OFF)
- ⑯ Metal/Memory Switch (M/ME)
- ⑰ Preset Switches (CH1/PRO., CH2, CH3, CH4)
- ⑱ Sensitivity Switch, Dolby Switch (DX/LOCAL, DOLBY ON/OFF)
- ⑲ Band Switch (AM, FM)
- ⑳ Speaker/Headset Switch, Intercom Switch/Control Volume (PUSH SP/HS)
- ㉑ Mute Level Control (MUTE LEVEL)
- ㉒ Radio/Tape Switch, Power Switch, Volume Control (PUSH RADIO/TAPE, POWER OFF)

DISASSEMBLY INSTRUCTIONS

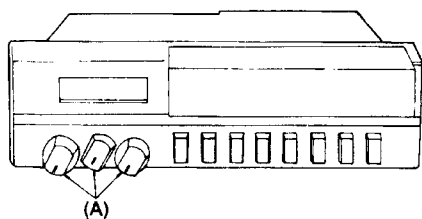


Fig. 1

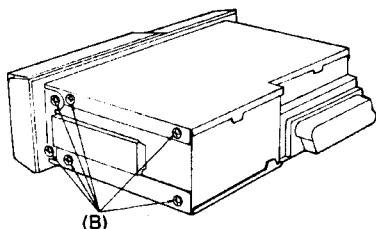


Fig. 2

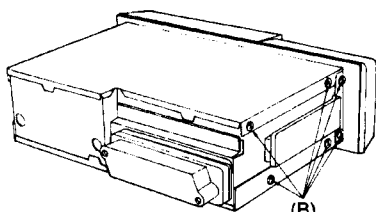


Fig. 3

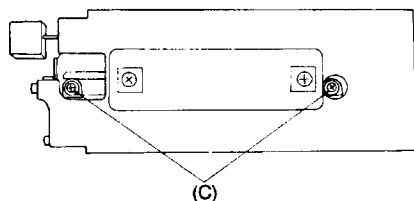


Fig. 4

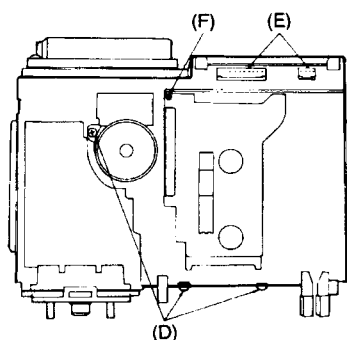


Fig. 5

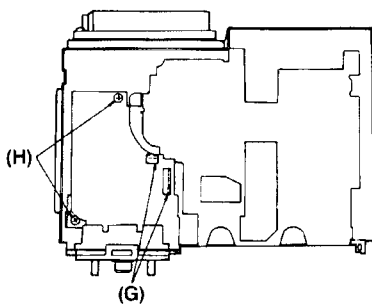


Fig. 6

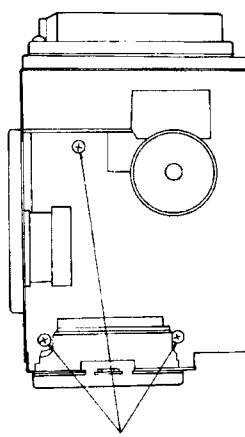


Fig. 7

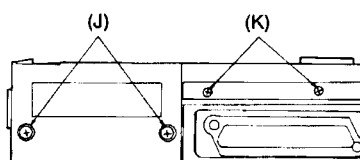


Fig. 8

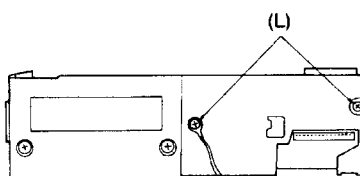


Fig. 9

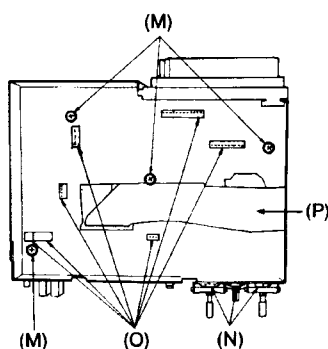


Fig. 10

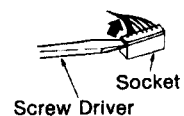


Fig. 11

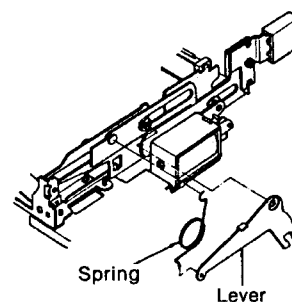


Fig. 12

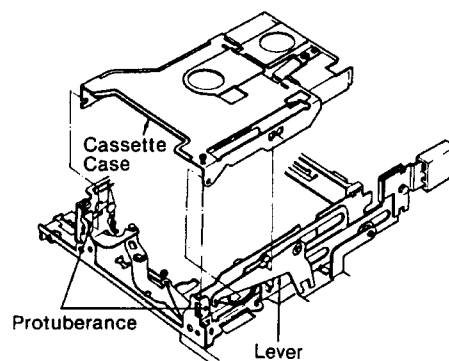


Fig. 13

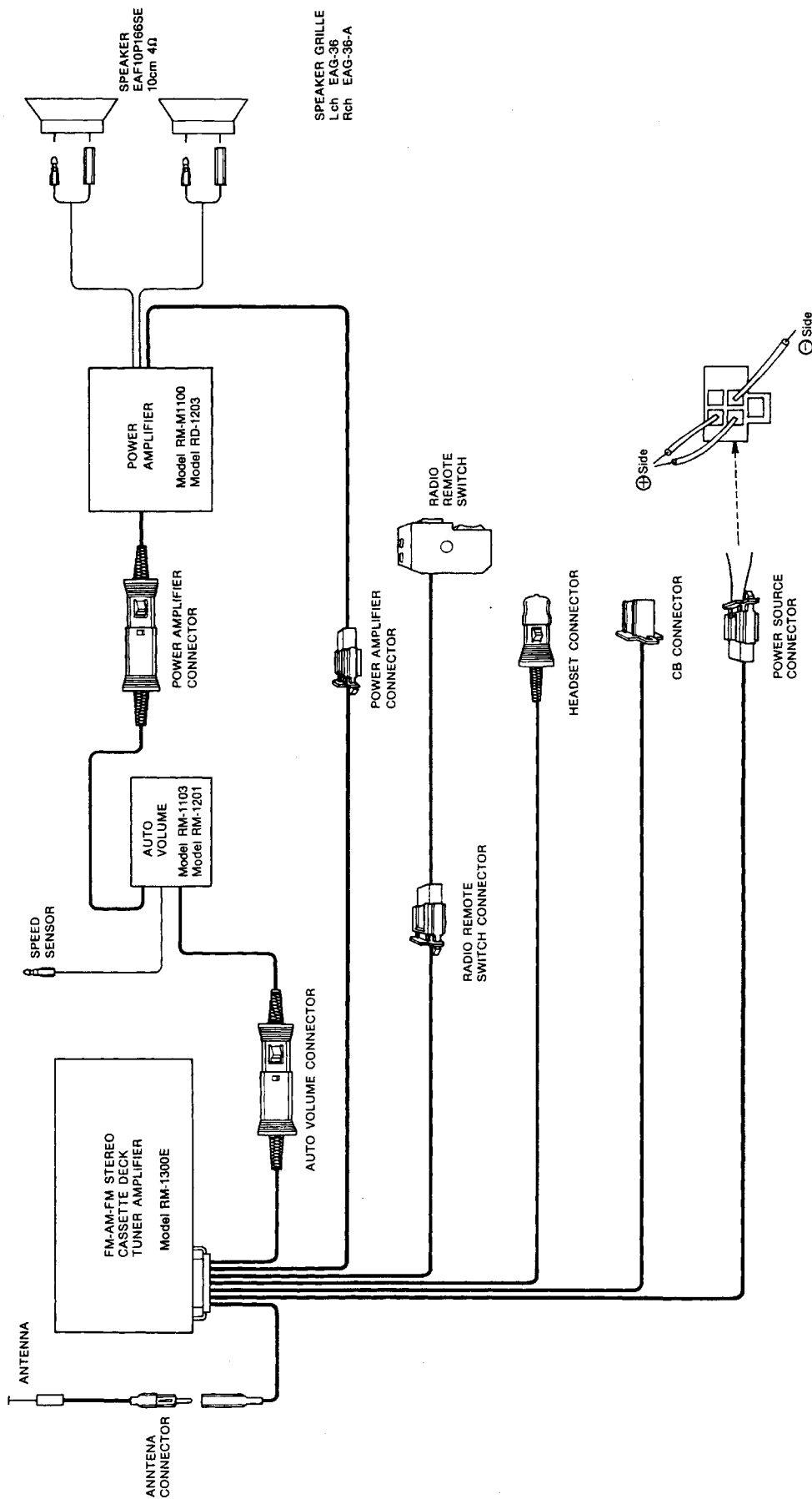
Ref. No.	Shown in Fig. —.	To remove —.	Remove —.
1	1	Front Panel, Covers	Knob(A)×3
2	2, 3		Screw (3×6)mm(B)×12
3	4	Mechanism	Screw (2.6×5)mm(C)×2
4	5		Screw (2.6×5)mm(D)×3
5			Socket * 1(E)×2
6	5	Cassette Case * 2	Loosen screw(F)×1
7	6	AM Circuit Board	Socket * 1(G)×2
8			Screw (3×6)mm(H)×2
9	7	LCD Circuit Board	Screw (3×6)mm(I)×3
10	8	Deck EQ & Ambience Circuit Board	Screw (3×6)mm(J)×2
11	8	Power Source Circuit Board	Screw (3×4)mm(K)×2
12	9		Screw (3×4)mm(L)×2
13	10	Main Circuit Board	Screw (3×6)mm(M)×4
14			Nut (7 ϕ)(N)×3
15			Socket * 1(O)×7
16			Jumper (FPC)(P)×1

* 1. Remove socket in the direction of arrow as shown in fig. 11.

* 2. To reassemble, note the following.

- (1) Insert the lever and spring in mechanism, as shown in fig. 12.
- (2) Insert the cassette case as shown in fig. 13.

AUDIO SYSTEM CONNECTION



HARNESS CONNECTION

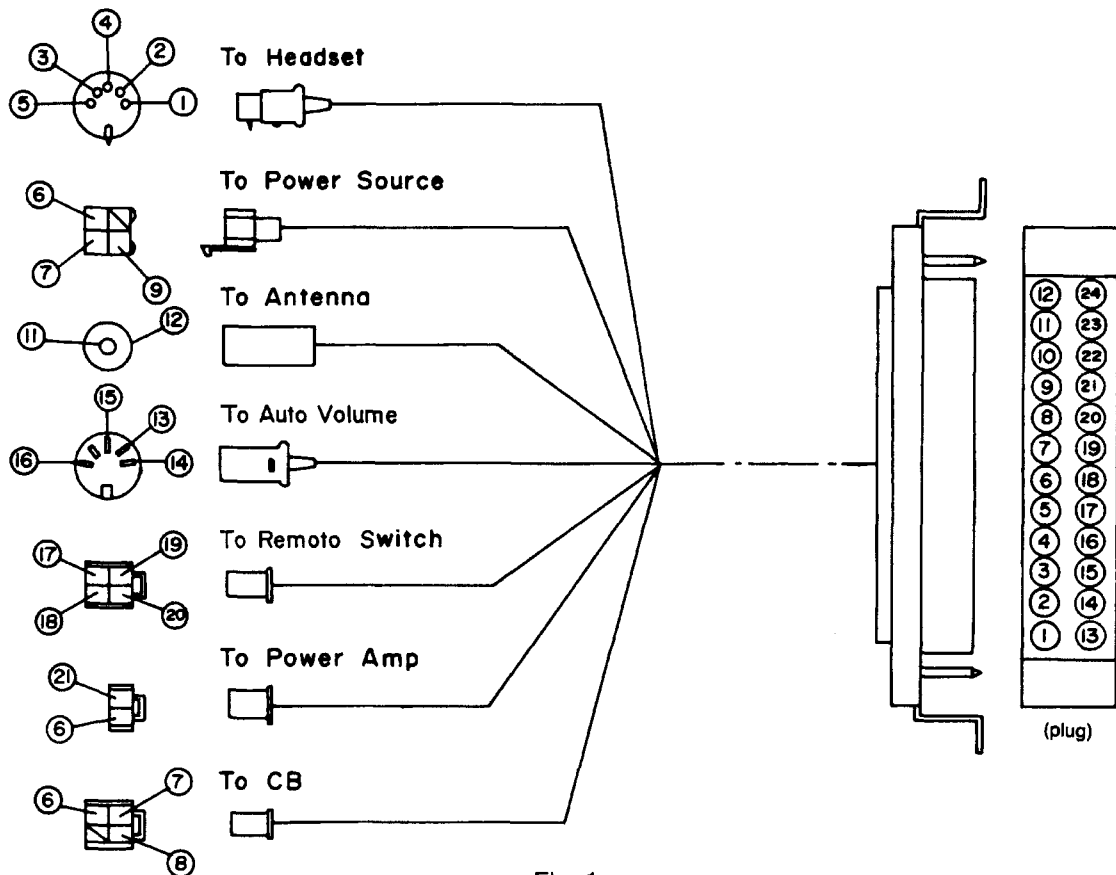
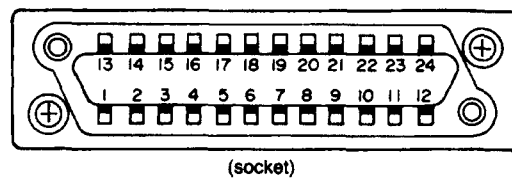


Fig. 1



- | | |
|--------------|----------|
| ① Microphone | ⑬ Rch |
| ② Earth | ⑭ Lch |
| ③ Rch | ⑮ Earth |
| ④ Earth | ⑯ +B Out |
| ⑤ Lch | ⑰ Mute |
| ⑥ Acc | ⑱ Up |
| ⑦ CB | ⑲ Down |
| ⑧ Earth | ⑳ Earth |
| ⑨ Earth | ㉑ Earth |
| ⑩ Earth | ㉒ Earth |
| ⑪ Antenna | ㉓ Earth |
| ⑫ Earth | ㉔ Earth |

Fig. 2

MEASUREMENTS AND ADJUSTMENTS

1. Set power switch to ON. (Supply DC 14V.)
2. Mute switch on Remote switch to OFF.
3. SP/HS switch to HS.
4. Set volume control to maximum.
5. Set band switch to AM, FM.
6. Set SENS switch to DX.

■ AM IF ALIGNMENT

BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
AM-IF ALIGNMENT						
(1) AM	 Earth.....(-)	450 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/ about 600 kHz)	 T302 (AM 1st IFT) T303 (AM 2nd IFT)	Adjust for maximum output.	

■ AM RF ALIGNMENT

BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLT METER	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
(1)	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 6)	522 kHz	522 kHz	 L303 (AM OSC Coil)	Adjust for 1.1±0.05V reading on DC voltmeter	
(2)	"	1620 kHz	1620 kHz	 CT302 (AM OSC Trimmer)	Adjust for 7.8±0.1 V reading on DC voltmeter	
(3)	Repeat steps (1) and (2).					
BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	AC VOLT METER	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
(4)	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 6)	603 kHz	603 kHz	 L301 (AM ANT Coil) L304 (AM ANT Coil)	Adjust for maximum reading on AC voltmeter	
(5)	"	1404 kHz	1404 kHz	 CT301 (AM ANT Trimmer) CT303 (AM ANT Trimmer)	"	
Repeat steps (4) and (5).						

■ AM NB ALIGNMENT

BAND	AM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	OSCILLOSCOPE	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
AM	Connect to antenna socket through AM RF dummy antenna. (Refer to Fig. 6)	603 kHz (400 Hz, 0% Mod. 74 dB)	603 kHz	 T301 (AM NB)	Adjust for maximum wave form on oscilloscope.	

■ FM ALIGNMENT

BAND	SIGNAL GENERATOR or SWEEP GENERATOR		FREQUENCY DISPLAY SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
	CONNCTIONS	FREQUENCY				
FM-IF ALIGNMENT						
(1) FM	High side thru. 0.01μF to test point ▼. Negative side to test point ▼.	10.7 MHz SWP.	Point of non-interference. (on/ about 90 MHz)	Connect vert. amp. of scope to test point ▼. Negative side to test point ▼.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to Fig. 3)
(2) FM	"	"	"	"	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to Fig. 4)

■ FM RF ALIGNMENT

	BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLTMETER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(1)	FM	Antenna socket FM RF Dummy (Refer to Fig. 7)	87.5 MHz	87.5 MHz	▼ ¹² ...(+) ▼ ⁹ ...(-)	L5 (FM OSC Coil)	Adjust for 1.2 ± 0.05 V reading on DC voltmeter.
(2)		"	108 MHz	108 MHz	▼ ¹² ...(+) ▼ ⁹ ...(-)	CT3 (FM OSC Trimmer)	Adjust for 8 ± 0.1 V reading on DC voltmeter.
(3)		Repeat steps (1) and (2).					
	BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	AC VOLTMETER	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
(4)	FM	Antenna socket FM RF Dummy (Refer to Fig. 7)	90.1 MHz (400 Hz 30%)	90.1 MHz	▼ ¹² ...(+) ▼ ⁹ ...(-)	L1 (FM ANT Coil) L4 (FM ANT Coil)	Adjust for maximum reading on AC voltmeter
(5)		"	106.1 MHz (400 Hz 30%)	106.1 MHz	▼ ¹² ...(+) ▼ ⁹ ...(-)	CT1 (FM ANT Trimmer) CT2 (FM ANT Trimmer)	"
		Repeat steps 4 and 5.					

■ DC BALANCE NB ALIGNMENT

BAND	FM SIGNAL GENERATOR		FREQUENCY DISPLAY SETTING	DC VOLTMETER (center "0")	ADJUSTMENT	REMARKS
	CONNECTIONS	FREQUENCY				
FM	Antenna socket	90.1 MHz (400 Hz, 30% Mod, 60 dB)	90.1 MHz	▼ ² ...(+) ▼ ³ ...(-)	T3 (FM 2nd IFT)	Adjust T3 for $-0.05 \sim 0.05$ V reading on DC voltmeter.

■ FM STEREO ALIGNMENT

Notes: 1. Stereo modulator • Connect stereo modulator output to EXT MOD terminal of signal generator. 2. FM signal generator • Pilot signal modulation to "10%". • Frequency approximately 100 MHz/Output level to "60~70 dB", 1~3 mV. • Modulation mode to "FM".					
CIRCUIT	SIGNAL GENERATOR	FREQUENCY COUNTER	AC VOLTMETER	ADJUSTMENT	REMARKS
PILOT	90.1 MHz (0% Mod, 80 dB)	High side thru, 100 k Ω to test point ▼. Negative side to ▼.	—	VR2 (Pilot)	Adjust for $76.00 \text{ kHz} \pm 50 \text{ Hz}$ reading on frequency counter.
SEPARATION	90.1 MHz (400 Hz, 30% Mod, 80 dB)	—	▼ ¹ ...Lch (+) ▼ ² ...Rch (+) ▼ ³ ...(-)	VR1 (Separation)	Make adjustment so that when the antenna input is subjected to L modulation (or R modulation.) R channel output (or L channel output) becomes minimum.
STATION DETECT	98.1 MHz (0% Mod, 60 dB)	—	▼ ¹³ ...(+) ▼ ⁹ ...(-)	T4 (FM SD)	Adjust T4 for maximum output at minus voltage.

■ AZIMUTH ALIGNMENT

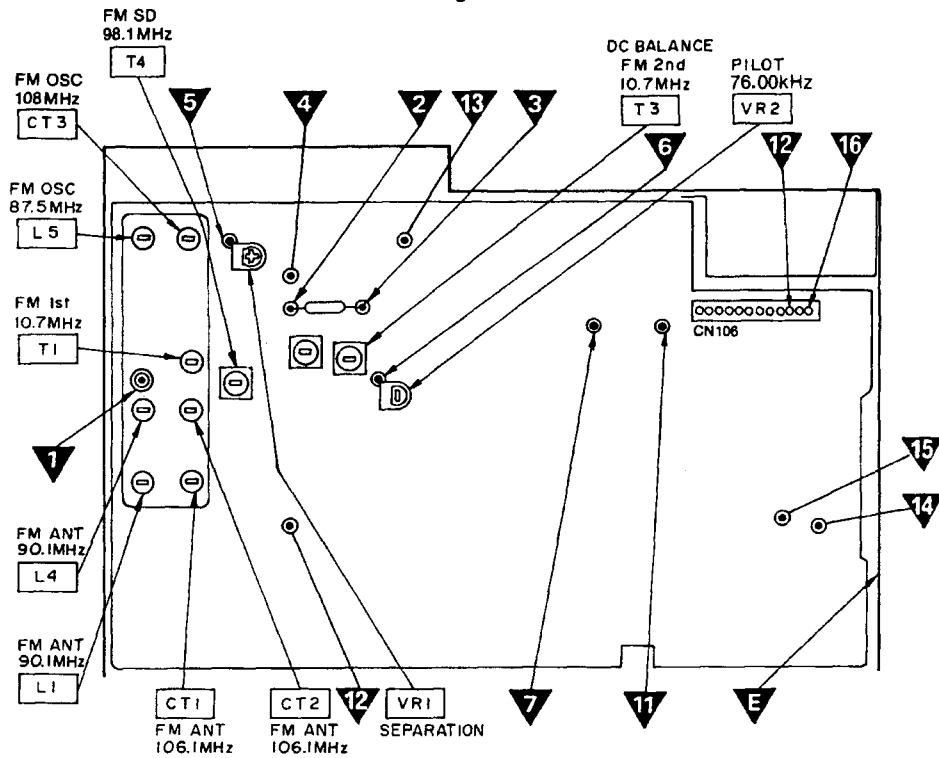
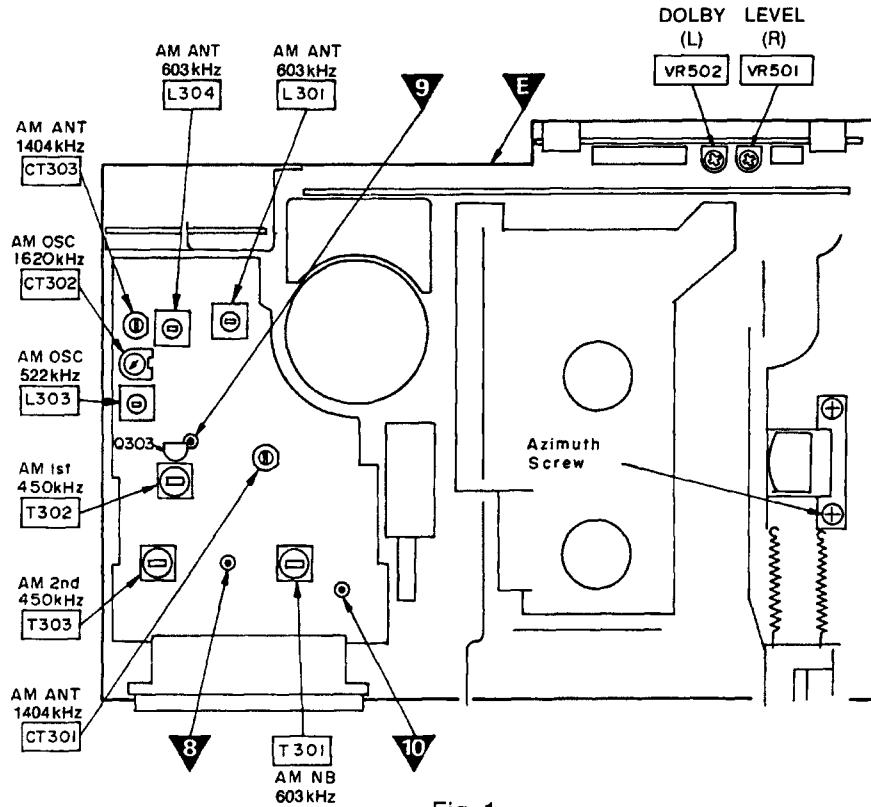
TAPE	AC VOLTMETER①	AC VOLTMETER②	ADJUSTMENT	REMARKS
Playback the azimuth tape. QZZCAC (10 kHz ~ 20 dB)	▼ ¹ ...(+) ▼ ² ...(-)	Across headset ▼ ¹ ...(+) ▼ ² ...(-)	Azimuth Screw (Refer to Fig. 5)	Adjust for same reading on AC voltmeter① and ②.

■ DOLBY LEVEL ALIGNMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Dolby Level	Tape QZZCFM (315 Hz 0 dB)	▼ ¹ ... (R) ▼ ² ... (L) ▼ ³ ... (-)	580 mV $\pm$ 1 dB	VR501 (R) VR502 (L)	Dolby switch ... OFF

■ ALIGNMENT POINT

*See the schematic diagram and the circuit board and wiring connection diagram for the location of the test points.



■ WAVE FORM

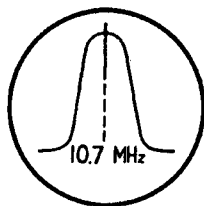


Fig. 3

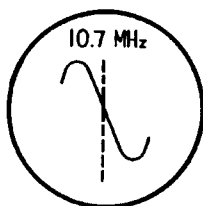


Fig. 4

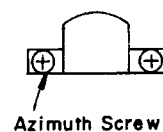


Fig. 5

■ AM RF DUMMY ANTENNA

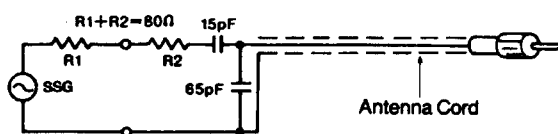


Fig. 6

■ FM RF DUMMY ANTENNA

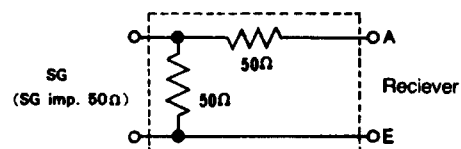


Fig. 7

LIQUID CRYSTAL DISPLAY (LCD)

- 1) The common and segment terminals of the LCD are connected in the following way:

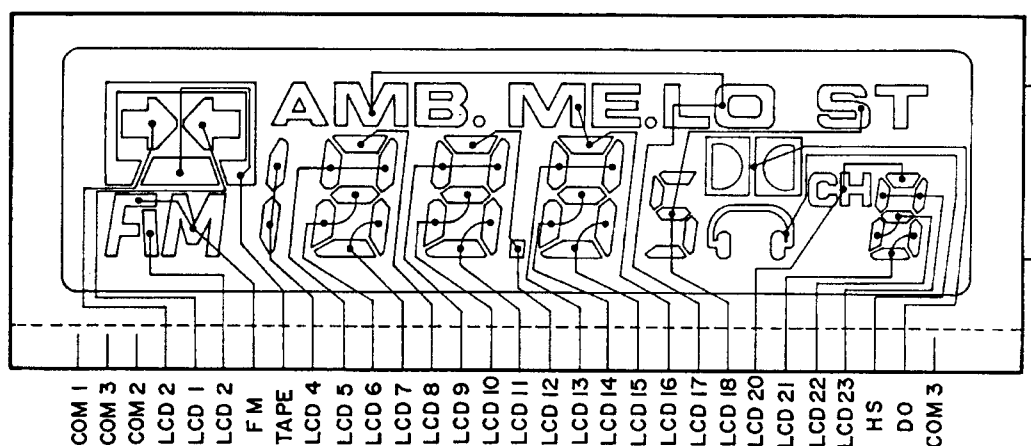


Fig. 1

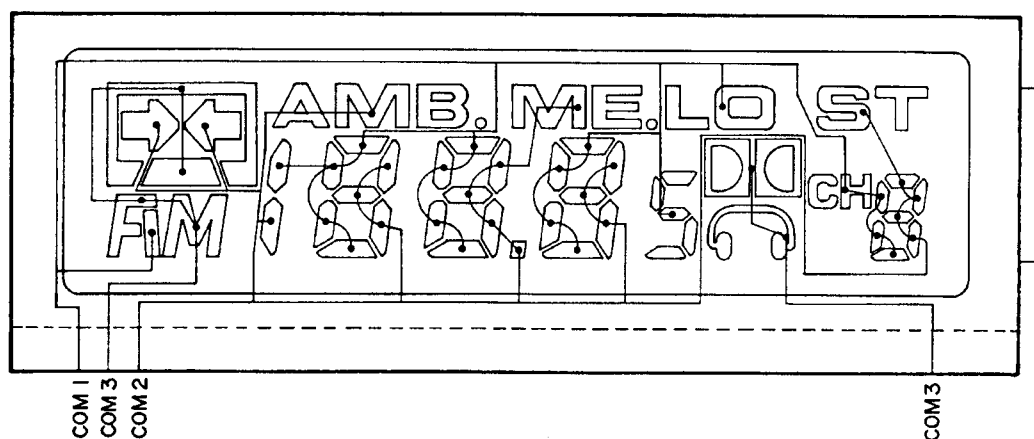


Fig. 2

2) Output signal waveforms of LCD segment

The illumination or nonillumination of segments (LCD1~23) on the LCD is determined by the combination of the segment drive signal and the common drive signals (COM1 and 2) from IC401. (See Fig. 3.)

The illumination or nonillumination of segments other than LCD1~23 (FM, Tape, HS, DO) is determined by the combination of the 80Hz signal made by the oscillation circuits in Q403 and Q404 and the segment drive signal made in IC402.

ex. Example display ("3")

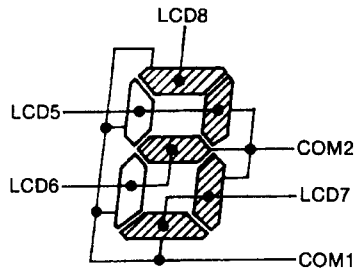


Fig. 3

UPD1708G555 (IC401): EACH TERMINAL FUNCTION & WAVEFORM

1) Terminal View

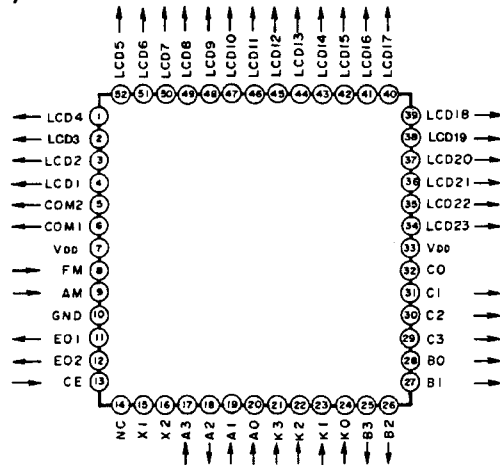


Fig. 1

2) Block Diagram

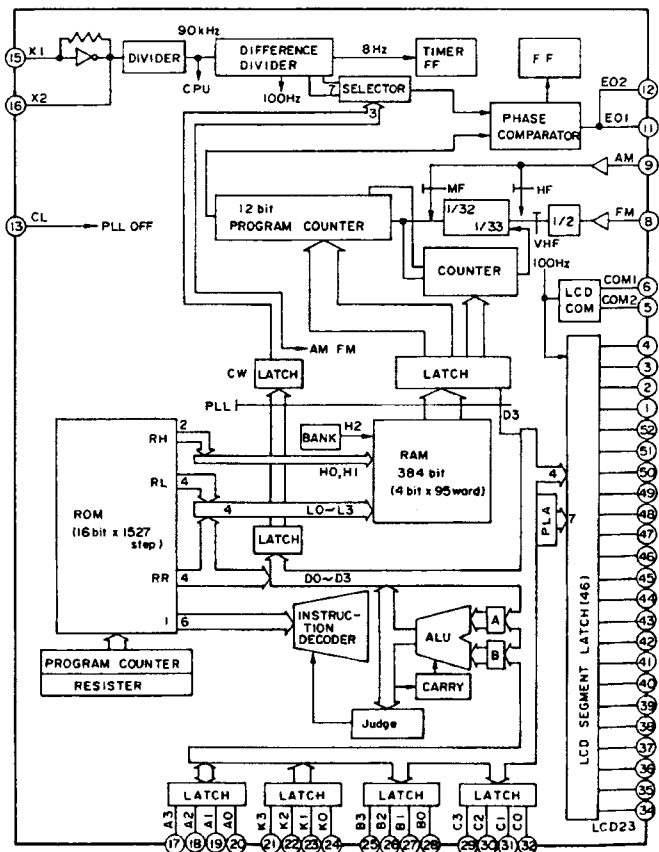


Fig. 2

3) Function of terminal (PLL controller IC401)

Pin No.	Mark	Description of terminal
1 4 34 52	LCD4 LCD1 LCD23 LCD5	Segment signal output terminal for display. (Refer to Fig. 1.)
5	COM2	Common signal output terminal connected to LCD. Output is delivered in 3 values of ground, $1/2V_{DD}$ and V_{DD} (at 5ms intervals) in a period of 50Hz. The segment turns ON when the difference in voltage is $\pm V_{DD}$ between these terminals and LCD1~LCD23.
6	COM1	
7	V_{DD}	Power supply terminal of device. Voltage of $5V \pm 10\%$ is supplied during operation of device. To hold the internal data memory (RAM), the voltage can be decreased to 2.5V. Note: Pins 7 and 33 are connected inside the chip. It is unnecessary to supply voltage to the pins.
33	V_{DD}	
8	FM	Input is local oscillator output (VCO) in a range of 10~130MHz (0.3Vp-p, min.). There are 1/2 fixed frequency division prescaler and 2-step (1/32, 1/33) prescaler internally. Therefore, when deciding the frequency dividing value of programmable divider, it must be decided from the frequency obtained by halving the local oscillator output (VCO).
9	AM	Input is local oscillator output (VCO) in a range of 0.5~20MHz (0.1Vp-p, min.). When the mode is shifted to FM, the AM terminal voltage automatically becomes the supply voltage of device.
10	GND	Ground terminal.
11	E01	When the divided oscillator frequency is higher than the standard frequency, H-level output is delivered from these terminals. When it is lower, L-level (0V) output is delivered. When they coincide, it results in floating.
12	E02	
13	CE	Device selection signal input terminal. The signal level should be high when the device is operated, and low when not operated. With this terminal shifted to low level, LCD (liquid crystal display) turns off and the memory is held.
14	NC	Not used in this unit.
15	X1	Connecting terminal for crystal oscillator. The crystal connected is 4.5MHz.
16	X2	
17	A3 (SD)	Inputs high signal when broadcast is received during auto tuning in the radio mode and low signal at all other times.
18	A2	Outputs high signal when ambience switch is pressed and turns on Q18.

Pin No.	Mark	Description of terminal
19	A1	Input terminal for key return signal from switch matrix
20	A0	
21	K3	
24	K0	
25	B3	Output terminal for key scan signal to switch matrix
28	B0	
29	C3	Output METAL-Dx/Lo
30	C2	Outputs switching signal for FM/AM bands When high signal is output, FM demodulation circuit operates and FM mode is set
31	C1	Outputs muting signal Normally high, low during muting
32	CO	Not used in this unit
33	Vcc	+5V terminal

ELECTRICAL PARTS LIST

Numbering System of Resistor

Example ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value (100Ω) 2R2
ERX	2	AN	J	
Type	Wattage	Shape	Tolerance	Value (2 2Ω)

Resistor Type	Wattage	Tolerance
ERD Carbon	10 1/8 W	±5%
ERG Metal Film	12 1/2 W	
ERX Metal Film	25 1/4 W	
ERO Fuse Type Metal	1 1 W	
RRD Carbon (Chip Type)	18 1/8 W	

Numbering System of Capacitor

Example ECKD	1H	102	Z	F
Type	Voltage	Value (1000 pF) M	Tolerance	Peculiarity
ECEA	50		R47	
Type	Voltage	Peculiarity	Value (0.47 μF)	

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
ECEA Electrolytic	0J 6.3 V	2H 500 V DC	C ±0.25 pF
ECCD Ceramic	1A 10 V	1 100 V	J ±5%
ECKD Ceramic	1C 16 V	DKC 400 V AC	K ±10%
ECQM Polyester	1E 25 V		Z ±80%
	1H 50 V		-20%
ECQP Polypropylene	1V 35 V		P +100%
	50 50 V		-0%
ECET Electrolytic			
ECEA□□□N Non Polar	25 25 V		
Electrolytic	16 16 V		
QCU □ Ceramic (Chip Type)			
ECUX Ceramic (Chip Type)			

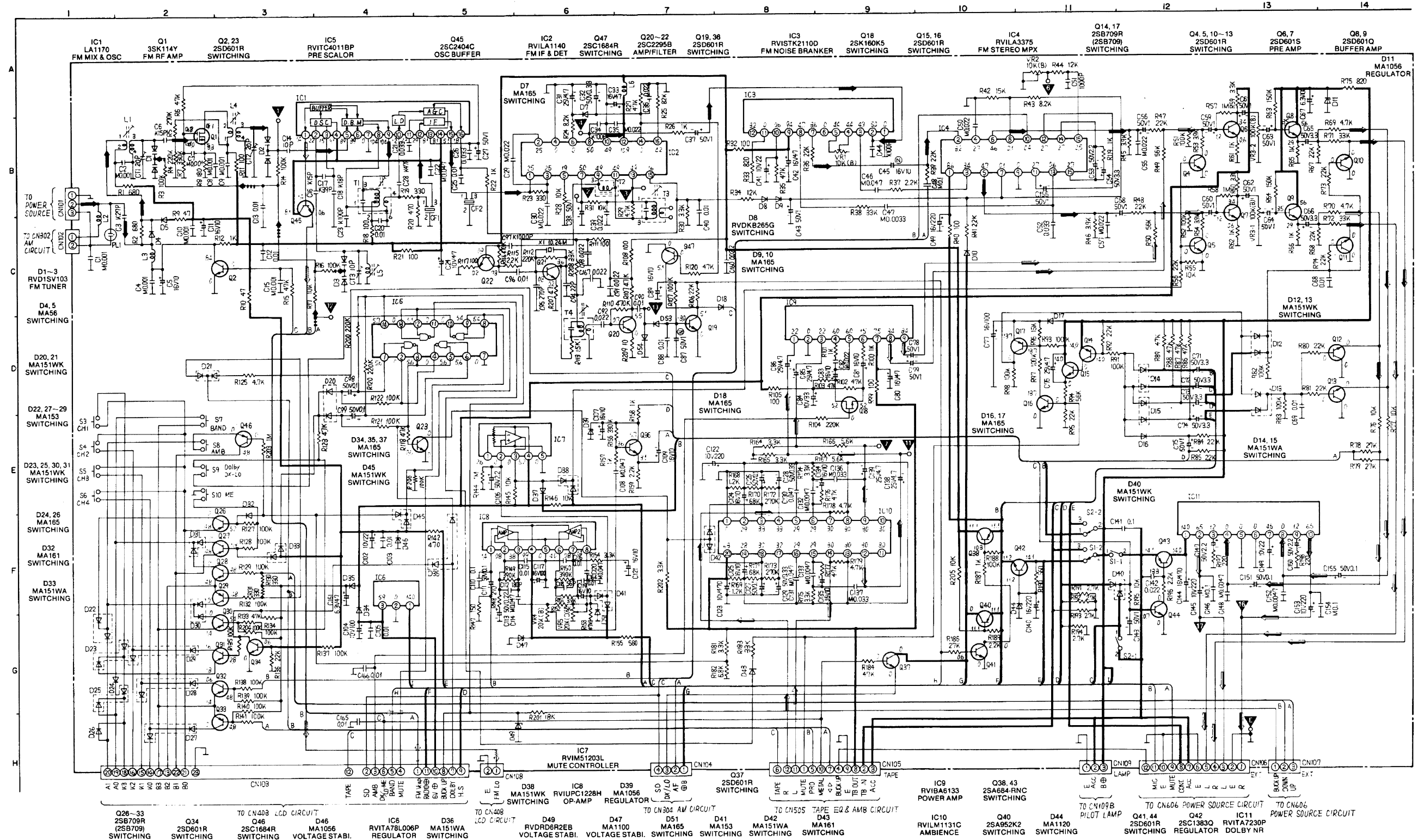
Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS			DIODES & RECTIFIERS			TRIMMER CONDENSERS		
IC 1	LA1170	Integrated Circuit	D 1, 2, 3	RVD1SV103	Diode	CT 1, 2	RCVTZ20F	FM ANT
IC 2	RVILA1140	Integrated Circuit	D 4, 5	MA56	Diode	CT 3	RCVTZ11F	FM OSC
IC 3	RVISTK2110D	Integrated Circuit	D 7, 9, 10, 16, 17, 18, 24, 26, 34, 35, 37, 51, 53, 54			CT 301, 303		
IC 4	RVILA3375	Integrated Circuit		MA165	Diode, Si	CT 302	RCVTZ20F	AM ANT
IC 5	RVITC4011BP	Integrated Circuit		RVDKB265G	Diode		RCVCTZ51F	AM OSC
IC 6	RVITA78L006P	Integrated Circuit	D 8			VARIABLE RESISTORS		
IC 7	RVIMS1203L	Integrated Circuit	D 11, 39, 46	MA1056	Diode	VR 1	EVND4AA00B14	Variable Resistor, Preset, 10kΩ (B)
IC 8	RVUUPC1228H	Integrated Circuit	D 12, 13, 20, 21, 23, 25, 30, 31, 38, 40, 45			VR 2	EVNM4AA00B14	Variable Resistor, Preset, 10kΩ (B)
IC 9	RVIBA6133	Integrated Circuit		MA151WK	Chip Diode	VR 3	EVURV3255B15	Variable Resistor, Preset, 100kΩ (B) (include S1)
IC 10	RVILM1131C	Integrated Circuit	D 14, 15, 33, 36, 42	MA151WA	Chip Diode	VR 4	EVURW3255B24	Variable Resistor, Preset, 20kΩ (B) (include S2)
IC 11	RVITA7230P	Integrated Circuit	D 22, 27, 28, 29, 41	MA153	Diode	VR 5	EVU5KAP15D24	Variable Resistor, Preset, 20kΩ (D)
IC 301	RVUUPC1215VE	Integrated Circuit	D 32, 43	MA161	Diode	VR 501, 502		
IC 302	RVIMS7171L	Integrated Circuit	D 44	MA1120	Diode		RVNCC24B1	Variable Resistor
IC 401	UPD1708G555	Integrated Circuit	D 47	MA1100	Diode	RESONATOR		
IC 402	RVITC4030BP	Integrated Circuit	D 49	RVDRD6R2EB	Diode	X 1	RVCX10240Q4Z	Crystal
IC 501	RVUUPC1228H	Integrated Circuit	D 301	MA153	Diode	X 401	RVCA4500NZN	Crystal
IC 502	RVUUPC78L08	Integrated Circuit	D 303, 304, 309, 501			CERAMIC FILTERS		
IC 701	AN6248	Integrated Circuit		MA165	Diode, Si	CF 1	RVFSFE107MSR	Ceramic Filter
IC 702, 703			D 305	RVDKB265G	Diode	CF 2	RVFSFE107MAR	Ceramic Filter
	DM106	Integrated Circuit	D 306, 307, 308	RVD1SV149	Diode	CF 301	RVFSFP450H	Ceramic Filter
TRANSISTORS			D 401, 402, 403, 404, 406			CF 302	RVFCFM2450Z	Ceramic Filter
Q 1	3SK114Y	FET		MA165	Diode, Si	PILOT LAMP		
Q 2, 4, 5, 10, 11, 12, 13, 15, 16, 19, 23, 34, 36, 37, 41, 44			D 405	MA151WA	Chip Diode	PL 1	XANR13T33	Neon Lamp
	2SD601R	Transistor	D 502	MA1068M	Diode	SWITCHES		
Q 6, 7	2SD601S	Transistor	D 503	MA1082M	Diode	S 3, 4, 5, 6, 7, 8, 9, 10	EVQOSQ04K	Switch, PROGRAM, M/ME, BAND, AMB, SENS/DOLBY
Q 8, 9	2SD601Q	Transistor	D 601, 602	SM112	Rectifier	S 701, 702	ESB643	Switch, FF/REW
Q 14, 17, 26, 27, 28, 29, 30, 31, 32, 33			D 701	MA1091M	Diode	S 703	RSS2C02Z	Switch, Tape
	2SB709	Transistor	D 702, 705	MA151WK	Chip Diode	S 705	RFA36Z	Switch, Muting
Q 18	2SK180K5	FET	D 703, 704	SM112	Rectifier	S 706	RFA37Z	Switch, Head
Q 20, 21, 22, 302			COILS					
	2SC2295B	Transistor, Si	L 1	RL04N135	Coil, FM Antenna			
Q 38, 43	2SA683R	Transistor	L 2, 3	RLQZB2R2K	Coil, Choke			
Q 40	2SA952K2	Transistor, Si	L 4	RL04N170	Coil, FM Antenna			
Q 42	2SC1383Q	Transistor	L 5	RL04N98	Coil, FM Antenna			
			L 6	RLQZB470K	Coil, Choke			
Q 45	2SC2404C	Transistor	L 301, 304	RLA2A3	Coil, AM Antenna			
Q 46, 47, 751, 752			L 302	RLQZB102K	Coil Choke			
	2SC1885-Q	Transistor	L 303	RL02A8	Coil, AM Oscillator			
Q 301	2SK184BL	FET	L 601, 602	RLT8D1A	Coil			
Q 303	2SC1359B	Transistor	TRANSFORMERS					
Q 401	2SK180K4	FET	T 1	RLI4B554	I.F. Transformer			
Q 402	2SC1623L6A	Transistor	T 2	RLI4A23	IFT, FM			
Q 403, 404	2SD601R	Transistor	T 3	RLI4A24	IFT, FM			
Q 501, 502, 503, 504			T 4, 301, 303					
	2SD601R	Transistor		RLI2A16	FM SD, AM NB, IFT, FM			
Q 701, 703, 704, 705, 706, 707, 710, 711, 712			T 302	RLI2A17	IFT, AM			
	2SD601R	Transistor						
Q 702	2SC2001K1	Transistor						
Q 706, 709	2SD1253P	Transistor						

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
CAPACITORS		C 31, 76, 85, 86, 138, 139	ECEA1EK4R7	C 123	ECEA1AU471	C 346	ECUX1E473MD
C 1, 2, 4, 7, 8, 9, 10, 15, 97	RCUX1H102MD	C 32, 128, 129	ECEA1HKR33	C 132, 133, 148, 152	RCUX1H472MD	C 348	ECEA1HK0R1
C 3	RCUX1H270KC	C 33, 42, 80	ECEA1CK470	C 136, 137	ECUX1E333MD	C 351	ECQB1H103JZ
C 5, 11, 81, 83, 89, 107, 109, 119, 121, 124, 125, 134, 135	ECEA1CK100	C 34, 44	RCUX1H101K	C 144	ECEA1CU471	C 401	RCUX1H102MD
		C 36, 39, 91, 92, 93, 142, 160, 167	RCUX1E223ZF	C 151, 155	ECSF1VE104	C 402	ECQV1H474JZ
				C 161	ECEA0JK470	C 403, 404, 405, 413, 420	RCUX1H103ZF
C 6, 16	RCUX1H150KC	C 41, 102, 149	ECEA1AK220	C 165, 166, 313, 414	ECKD1H103ZF	C 406	ECEA1HK0R1
C 12, 13, 20, 25, 40, 68, 69, 88, 90, 96, 103, 105, 110, 115, 116, 164	RCUX1H103ZF	C 45	ECEA1CN100S	C 301, 303, 305, 310, 311, 320, 324, 325, 336, 511, 512, 514	RCUX1E223ZF	C 409	ECEA1CK100
		C 47	RCUX1H332MD			C 410, 411, 412	RCUX1H221K
C 14	RCUX1H100KC	C 48, 141, 146, 154	ECUX1E104MD	C 302	RCUX1H471KB	C 422	ECEA0JU222
C 17	RCUX1H390KC	C 49, 140	ECEA1CU221	C 304	RCUX1H101K	C 424	ECEA1HK010
C 18	RCUX1H180KC	C 51	ECQP2A102JZ	C 306, 322, 504, 508, 515	ECEA1CK100	C 425	ECUX1E473MD
C 21, 26, 52	RCUX1E333ZF	C 53, 106, 147, 150	ECEA1HK2R2	C 307, 317, 334	ECUX1H153MD	C 426	ECCD1H820K
C 22, 46, 108, 114, 120, 130, 131	ECUX1E473MD	C 54, 65, 66, 71, 72, 73, 74	ECEA1HK3R3	C 308, 327, 505	ECEA1CK470	C 501, 509	ECSF1CD224
		C 56, 58	ECSF1CE105	C 309, 323, 338, 340, 350	RCUX1E103MD	C 502, 506	ECEA0JK330
C 23	ECUX1H101JR	C 67	ECEA0JK101	C 312, 326, 519, 520	ECEA1EK4R7	C 510, 521	RCUX1H152MD
C 24	ECEA1AK470	C 77, 117	ECEA1CU101	C 314	RCUX1H102MD	C 513	ECEA1AU221
C 27, 37, 38, 43, 59, 60, 61, 62, 63, 64, 75, 76, 79, 143, 156	ECEA1HK010	C 84	ECEA1AK330	C 315	RCUX1H103ZF	C 601, 604, 605, 606, 608, 609, 610, 611, 612, 613, 614	ECUX1H102ZF
		C 87	ECEA1HN010	C 318	ECQP2A471JZ	C 602, 603	ECUX1E104MD
C 28	RCUX1H470KC	C 94, 316, 407, 408	RCUX1H220KC	C 319	ECEA1HKR47	C 607, 615	ECEA1CU471
C 29, 30, 35, 50, 55, 57, 82	ECUX1H223MD	C 95	RCUX1H271K	C 321, 518	ECEA1AK220	C 701	ECEA1HU010
		C 98, 99, 111, 126, 127	ECEA1HK0R1	C 328	RCUX1E333ZF	C 702	ECEA1AU470
		C 104	ECEA1AU101	C 329, 516, 517	ECEA1HK010	C 703	ECQV1H334JZ
		C 112	RCUX1H181K	C 330	RCUX1H472MD	C 704, 705	ECEA1AK470
		C 113	ECEA1HKR22	C 332, 503, 507	RCUX1H682MD	C 706, 707	ECUX1E473MD
		C 118	RCUX1H560KC	C 342	RCUX1H332MD	C 708	ECUX1E104MD
		C 122, 145, 153	ECEA1AU221	C 344	ECUX1H223MD	C 709	RCUX1H682MD
						C 710, 711	ECEA1CU330

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
RESISTORS							
R 1, 2	ERJ6GCJ681	R 30, 59, 60, 154, 164, 165, 174, 175, 181, 202, 208	ERJ6GCJ332	R 303	ERDS2TJ332	R 507	ERDS2TJ101
R 3, 14, 16, 51, 52, 82, 83, 91, 93, 97, 98, 107, 121, 122, 127, 128, 129, 132, 134, 135, 137, 138, 139, 140, 141, 188, 204	ERJ6GCJ104	R 31	ERD25FJ103	R 304	ERJ6GCJ105	R 514, 515, 521	ERJ6GCJ272
		R 33, 75	ERJ6GCJ821	R 305	ERJ6GCJ270	R 523	ERJ6GCJ333
		R 34, 44	ERJ6GCJ123	R 306	ERJ6GCJ182	R 524	ERJ6GCJ331
		R 36, 39, 47, 48, 56, 67, 88, 73, 74, 80, 81, 84, 85, 92, 95, 106, 136, 152	ERJ6GCJ223	R 308	ERJ6GCJ330	R 525	ERJ6GCJ681
R 4, 104, 120, 200	ERJ6GCJ224	R 37, 41, 115, 159, 189, 196	ERJ6GCJ222	R 310, 330, 333	ERJ6GCJ470	R 530	ERJ6GCJ561
R 5, 112, 172, 173	ERJ6GCJ274	R 38, 71, 72, 183	ERJ6GCJ333	R 311, 312, 314, 522	ERJ6GCJ104	R 702, 712, 714	ERJ6GCJ224
R 6, 15, 27, 35, 86, 87, 88, 89, 102, 103, 118, 133, 153, 176, 177, 184, 210	ERJ6GCJ473	R 42, 96	ERJ6GCJ153	R 313, 317, 319, 326	ERJ6GCJ103	R 703, 720, 722	ERJ6GCJ222
		R 45, 46, 53, 54, 151	ERJ6GCJ392	R 315	ERJ6GCJ101	R 704	ERJ6GCJ333
		R 49, 50, 94	ERJ6GCJ563	R 316, 527, 528	ERJ6GCJ473	R 705, 713	ERJ6GCJ104
R 7, 156	ERJ6GCJ334	R 57, 58, 144, 203	ERJ6GCJ105	R 322, 324, 526, 529	ERJ6GCJ222	R 706	ERJ6GCJ471
R 8	ERJ6GCJ181	R 63, 64	ERJ6GCJ154	R 323, 328	ERJ6GCJ153	R 707, 710	ERJ6GCJ472
R 9, 10, 207	ERJ6GCJ470	R 78, 79, 186	ERJ6GCJ273	R 325	ERJ6GCJ151	R 708, 709	ERJ6GCJ473
R 11, 18, 21, 32, 40, 99, 105, 108, 111, 117, 209	ERJ6GCJ101	R 110, 116, 301, 307, 309, 327, 505, 511	ERJ6GCJ474	R 332	ERJ6GCJ683	R 711	ERJ6GCJ223
				R 334	ERJ6GCJ183	R 715	ERJ6GCJ122
R 12, 22, 26, 61, 62, 65, 66, 100, 101, 119, 157, 158, 187	ERJ6GCJ102	R 113, 318	ERJ6GCJ152	R 335	ERDS2TJ824	R 716, 718	ERJ6GCJ103
		R 147	ERJ6GCJ151	R 401	ERJ6GCJ682	R 717	RRD18XJ103
R 17, 28, 55, 76, 77, 145, 146, 195, 205	ERJ6GCJ103	R 148	ERJ6GCJ271	R 402	ERJ6GCJ222	R 719	RRD18XJ122
		R 149, 150	ERJ6GCJ394	R 403	ERJ6GCJ472	R 721, 724	ERJ6GCJ102
		R 155, 190	ERJ6GCJ561	R 404, 414	ERJ6GCJ473	R 723, 725	RRD18XJ102
		R 166, 167	ERJ6GCJ562	R 405, 406, 407, 408, 409, 410, 416	ERJ6GCJ104		
		R 168, 169	ERJ6GCJ122	R 412	ERJ6GCJ331	CHIP JUMPER	
		R 170, 171	ERJ6GCJ683	R 413	ERJ6GCJ102	RJ 1, 2, 3, 4, 5, 25	RRD18XK000
		R 182	ERJ6GCJ682	R 415, 421	ERJ6GCJ823	RJ 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 301, 302, 303, 304, 305, 306, 307, 503, 504, 401, 402	ERJ6GCJ000
		R 191, 192, 193, 194	ERJ6GCJ272	R 417, 419	ERJ6GCJ223		
R 19, 23, 130, 131	ERJ6GCJ331			R 418	ERJ6GCJ333		
R 20, 142	ERJ6GCJ471			R 420	ERJ6GCJ101		
R 24, 43	ERJ6GCJ822			R 422, 423, 425, 426	ERJ6GCJ393		
R 25	ERJ6GCJ823			R 424	ERJ6GCJ683		
R 29, 69, 70, 109, 123, 125, 178, 179	ERJ6GCJ472			R 427	ERJ6GCJ470		
				R 428	ERJ6GCJ681		
		R 197, 198	ERJ6GCJ221			RJ 501, 502, 601	RRD18XK000
		R 201	ERJ6GCJ183	R 501, 513	ERJ6GCJ274	RJ 701, 702, 703, 704, 705, 706, 708, 709, 712	ERJ6GCJ000
		R 206	ERDS2TJ104	R 502, 509	ERJ6GCJ224		
				R 503, 506, 517, 519	ERJ6GCJ334		
				R 504, 510	ERJ6GCJ121		
				R 506, 512, 520	ERJ6GCJ223		
		R 302, 320, 321, 516, 518	ERJ6GCJ332			RJ 707, 710, 711	RRD18XK000

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SCHEMATIC DIAGRAM (MAIN)



Described in the schematic diagram are two types of numbers, the supply parts number and production parts number for IC, Q and D. One type of number is used for supply parts number and production parts number when they are identical.

e.g. Q1
2SC2412LN(R,S) — Production parts number
or 2SC2405 (S T)
2SC2412R — Supply parts number

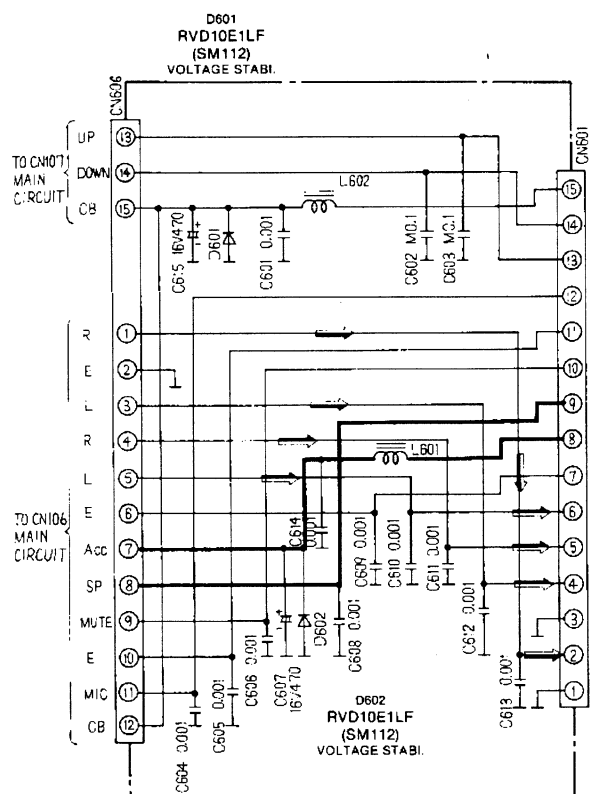
The supply parts number is described alone in the replacement parts list.

Notes:

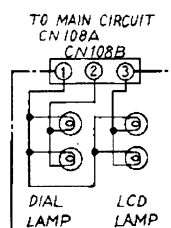
1. S1-1: Power switch in "OFF" position.
2. S1-2: Radio/Tape switch in "RADIO" position.
(1...RADIO, 3...TAPE)
3. S2-1: Intercom switch "OFF" position.
4. S2-2: Speaker/Headset switch in "Headset" position.
(1...Headset, 3...Speaker)
5. S3: Preset ch 1/program switch.
6. S4: Preset ch 2 switch.
7. S5: Preset ch 3 switch.
8. S6: Preset ch 4 switch.
9. S7: Band switch in "FM" position.
10. S8: Ambience switch in "OFF" position.
11. S9: Dolby/Sensitivity switch.
12. S10: Memory/Metal switch.
13. DC Voltage measurements are taken with electronic
voltmeter from negative voltage line.
• FM position.
14. VR1: Separation adjustment VR.
VR2: Pilot VCO adjustment VR.
VR3: Volume control VR.
VR4: Intercom control VR.
VR5: Muting level control VR.

-  FM Signal
 FM Vcap Control Signal
 FM OSC Signal
 AM Vcap Control Signal
 AM OSC Signal
 Tape & AF Signal
 + Voltage Line

SCHEMATIC DIAGRAM (POWER SOURCE-1)

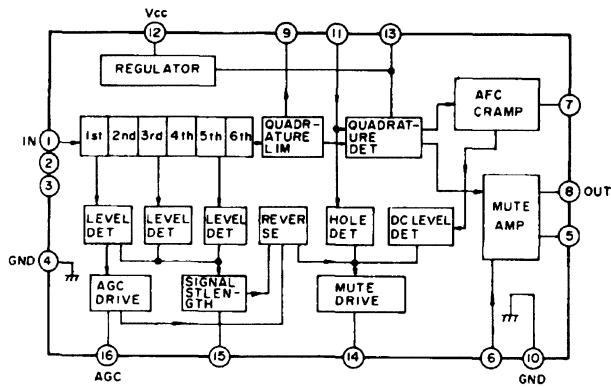


SCHEMATIC DIAGRAM (PILOT LAMP)

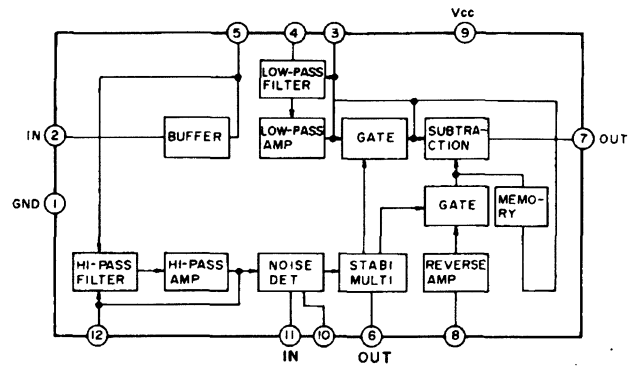


■ IC BLOCK DIAGRAM

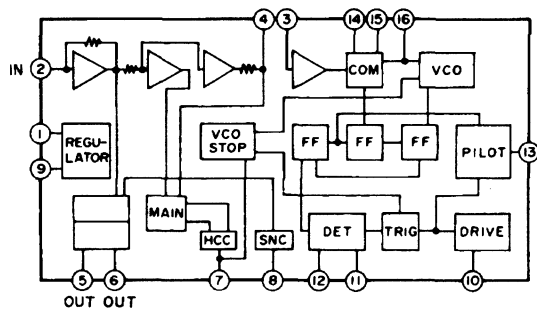
IC2 RVILA1140



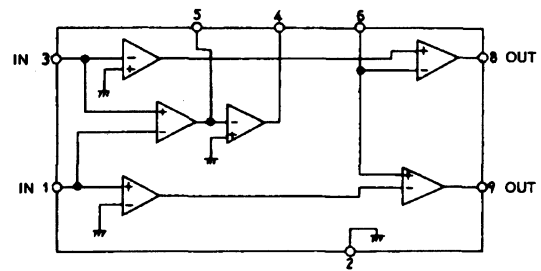
IC3 RVISTK2110D



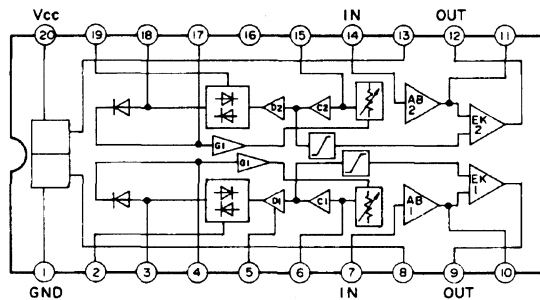
IC4 RVILA3375



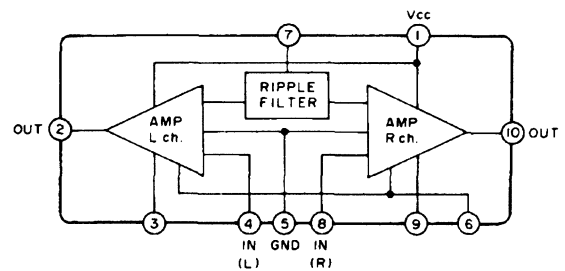
IC9 RVIBA6133



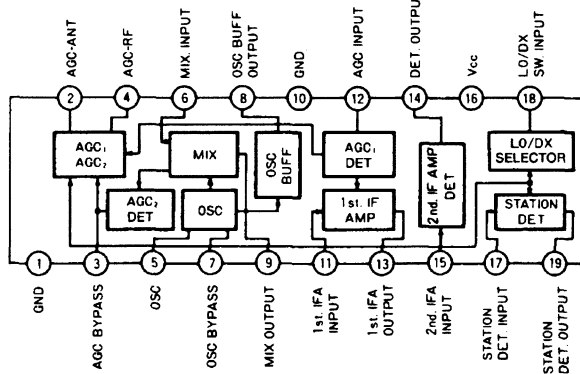
IC10 RVILM1131C



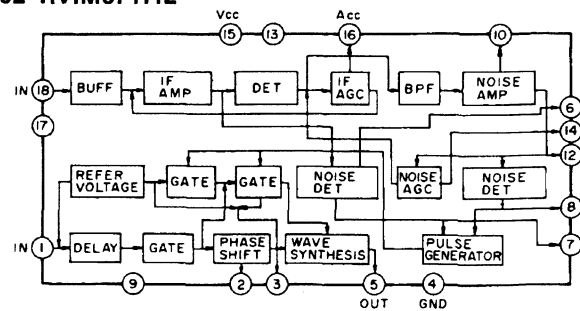
IC11 RVITA7230P



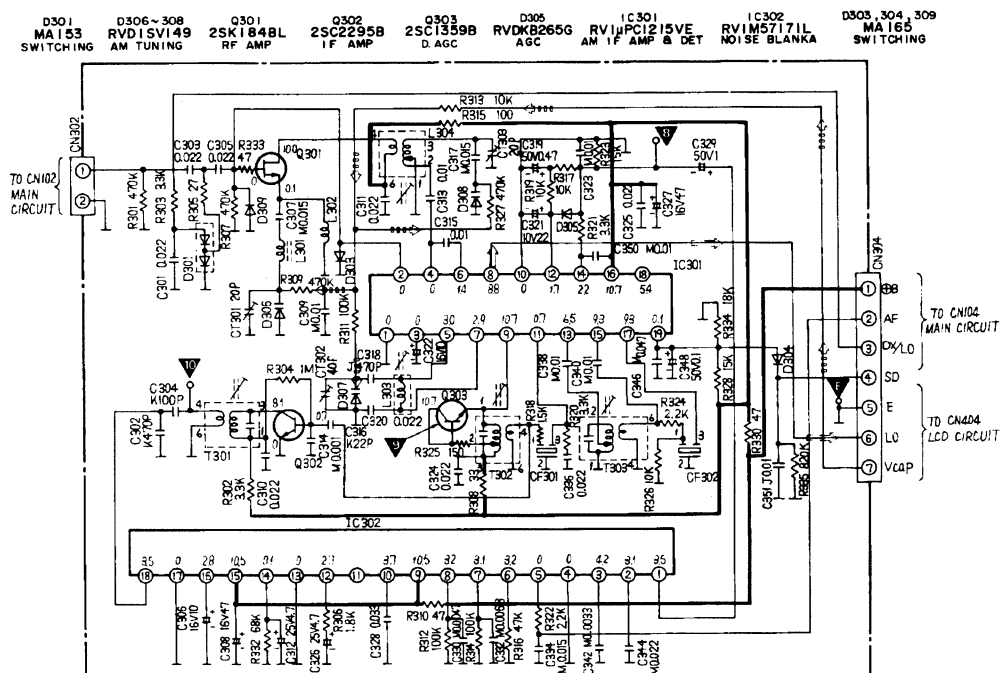
IC301 RVIUPC1215VE



IC302 RVIM5717IL



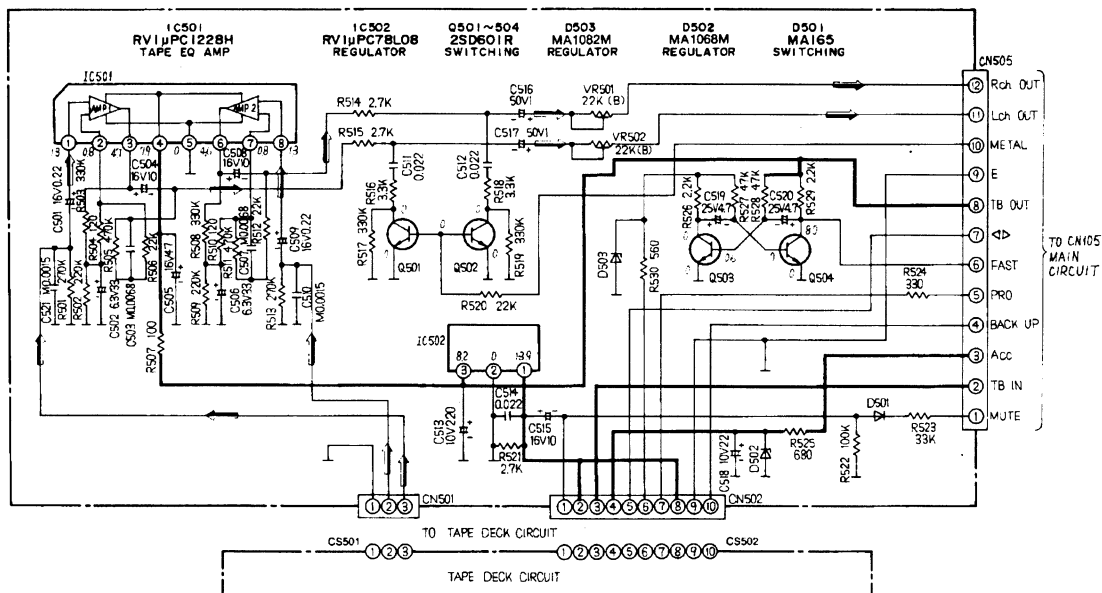
SCHEMATIC DIAGRAM (AM)

**Note:**

DC voltage measurements are taken with electronic voltmeter from negative voltage line.

• AM position.

SCHEMATIC DIAGRAM (TAPE EQ & AMBIENCE)



◀ Tape & AF Signal
 — + Voltage Line

Note:

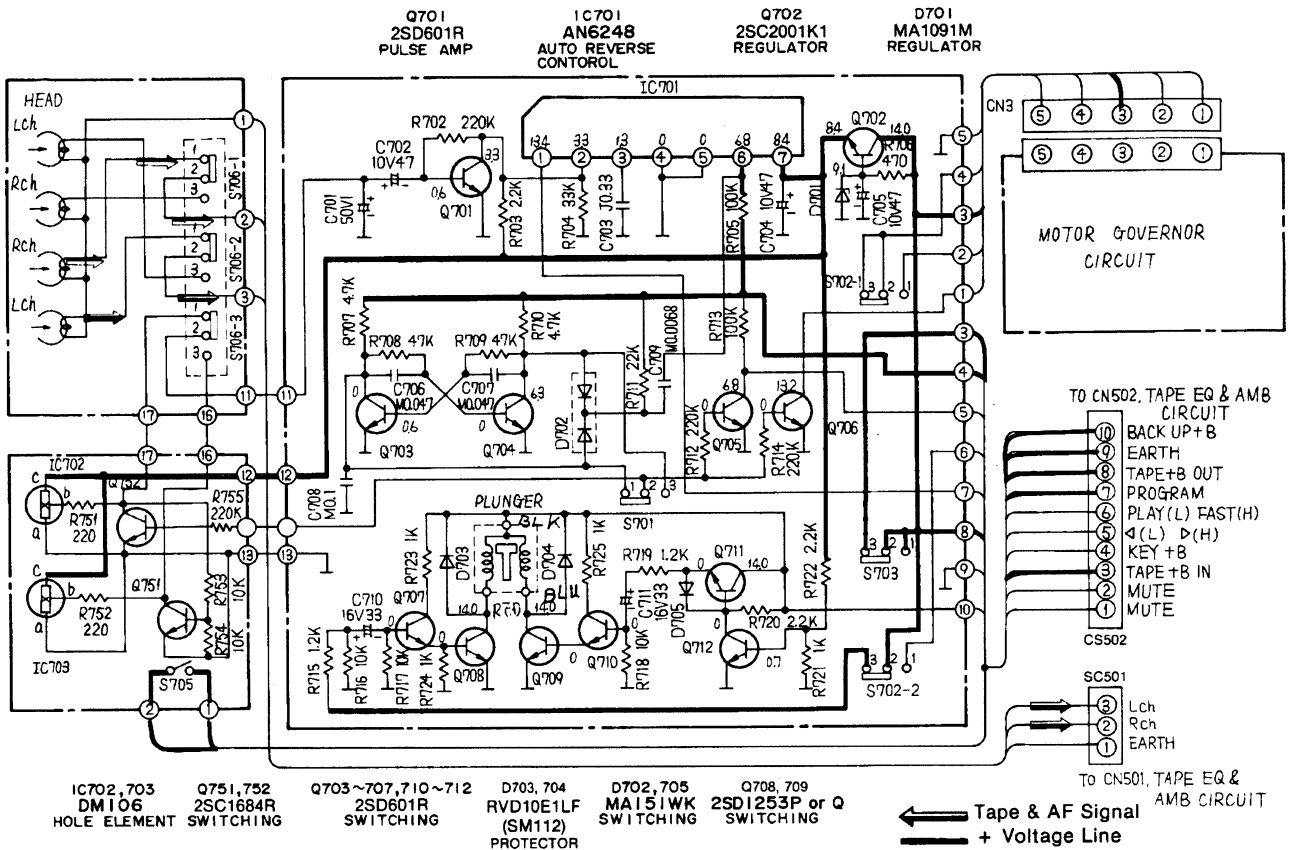
DC voltage measurements are taken with electronic voltmeter from negative voltage line.

• AM position.

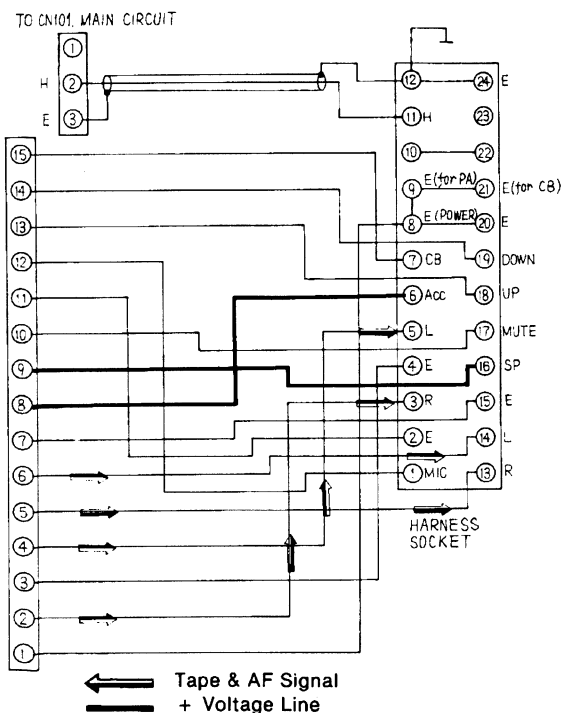
VR501: Dolby level (R) adjustment VR.

VR502: Dolby level (L) adjustment VR.

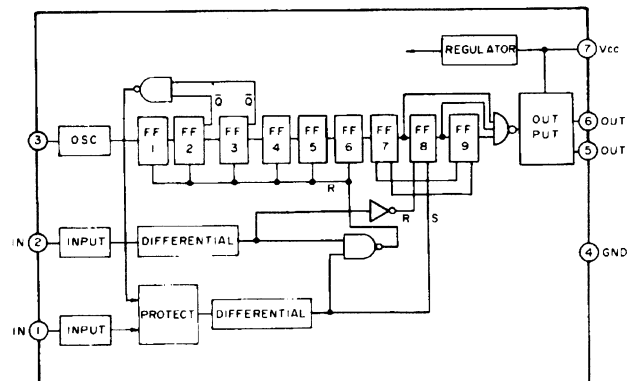
SCHEMATIC DIAGRAM (DECK LOGIC)



SCHEMATIC DIAGRAM (POWER SOURCE-2)



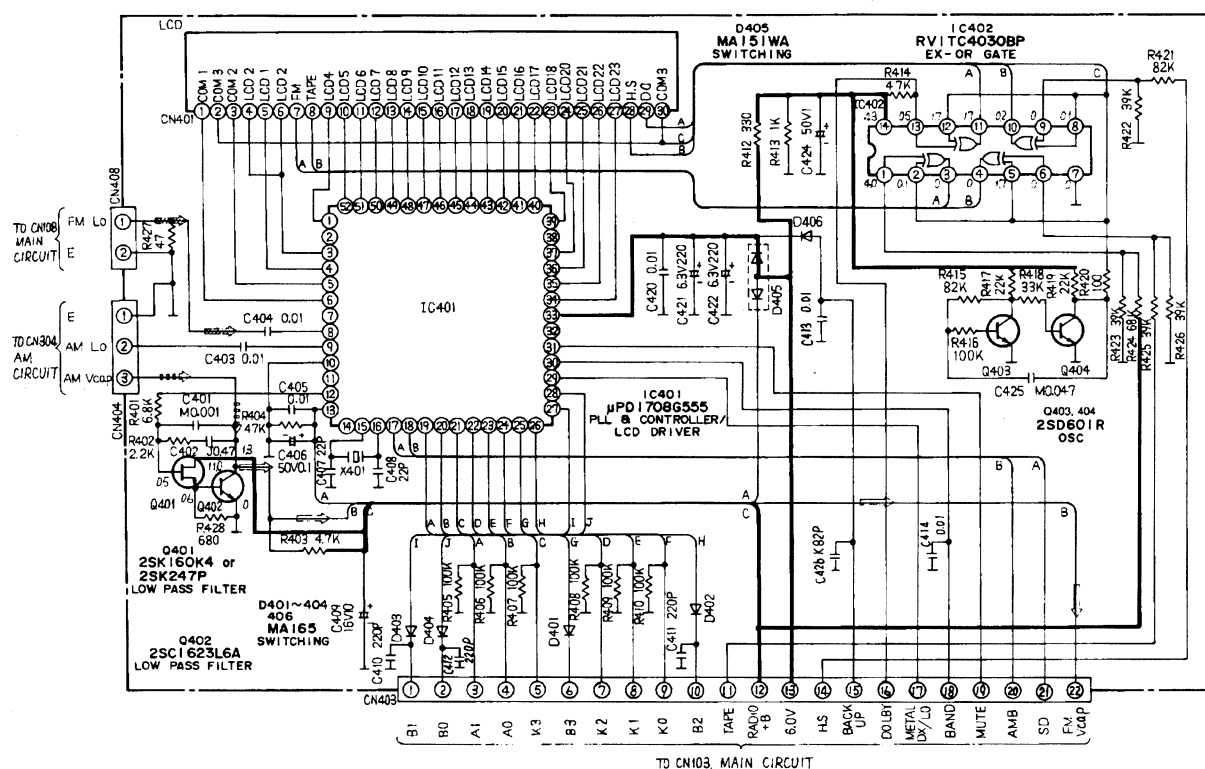
IC701 AN6248



- S701:** Forward/Reverse switch in "Forward" position. (1...Forward, 3...Reverse)
- S702-1:** Motor speed switch in "FAST" position. (1...FAST, 3...PLAY)
- S702-2:** Plunger switch in "ON" position. (1...ON, 3...OFF)
- S703:** Tape switch in "ON" position. (1...OFF, 3...ON)
- S705:** Mute switch.
- S706-1, S706-2:** Head switch.
- S706-3:** Hole Element switch.
- DC voltage measurements are taken with electronic voltmeter from negative voltage line.

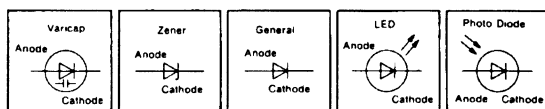
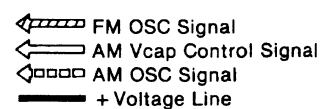
• Tape position.

SCHEMATIC DIAGRAM (LCD)

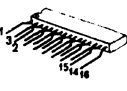
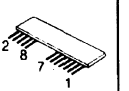
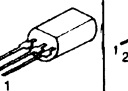
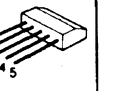
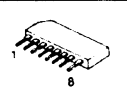
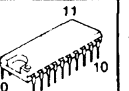
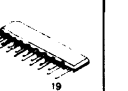
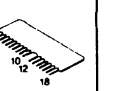
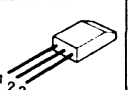
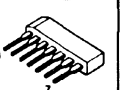
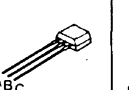
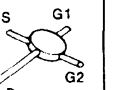
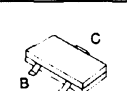
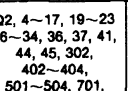
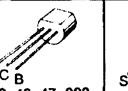
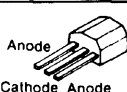
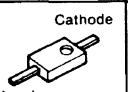
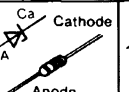
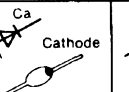
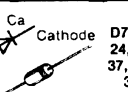
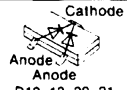
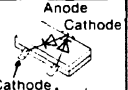
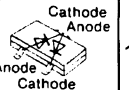
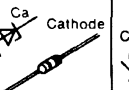
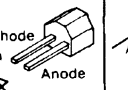
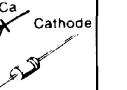
**Note:**

DC voltage measurements are taken with electronics voltmeter from negative voltage line.

- FM/Local/Headset position.

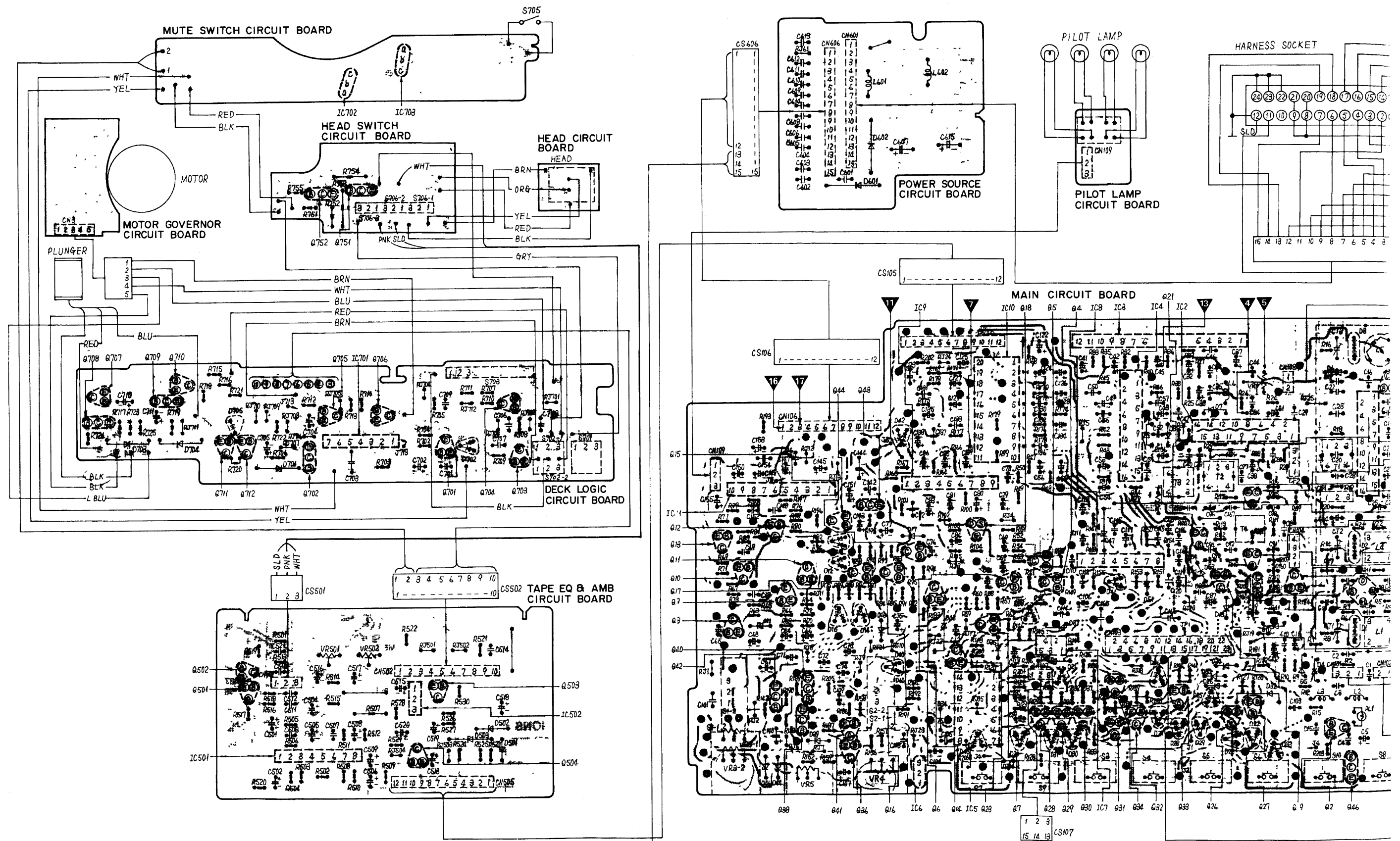


TERMINATIONS

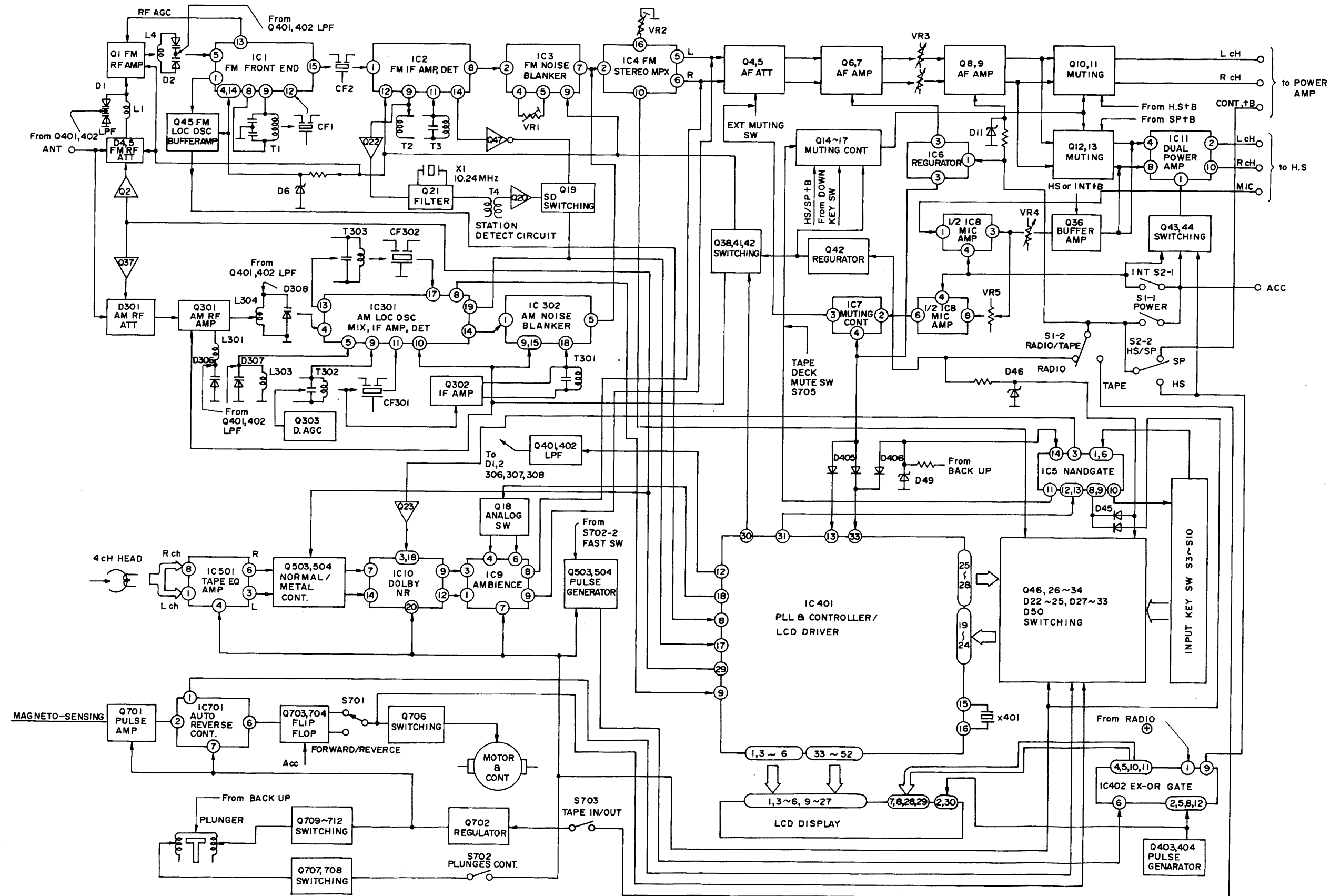
 IC1, 4	 IC2	 IC3	 IC51, 402	 IC6	 IC7
 IC8, 501	 IC9	 IC10	 IC11	 IC301	 IC302
 IC401	 IC502	 IC701	 IC702, 703	 Q1	
 Q2, 4~17, 19~23, 26~34, 36, 37, 41, 44, 45, 302, 402~404, 501~504, 701, 703~707, 710~712	 Q18, 401	 Q38, 42, 43	 Q40, 46, 47, 303, 702, 708, 709, 751, 752	 Q301	
 D1~3	 D4, 5	 D6, 11, 39, 46, 502, 503, 701	 D8, 305	 D7, 9, 10, 16~18, 24, 26, 32, 34, 35, 37, 43, 49~51, 74, 303, 304, 309, 401~404, 406, 501	
 D12, 13, 20, 21, 23, 25, 30, 31, 38, 40, 45, 702, 705	 D14, 15, 33, 36, 42, 405	 D22, 27, 28, 29, 41, 301	 D44, 47	 D306~308	 D601, 602

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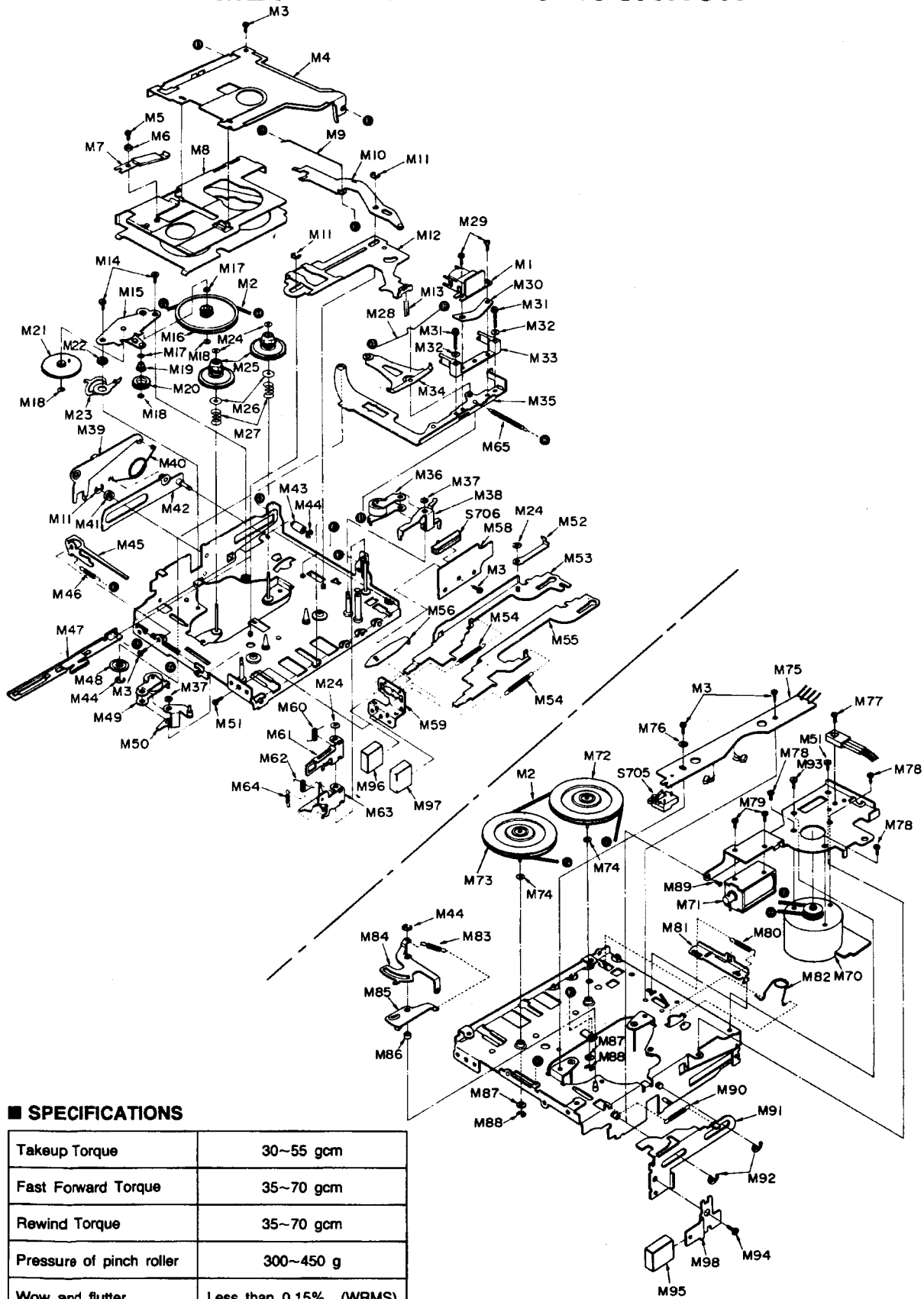
CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



BLOCK DIAGRAM



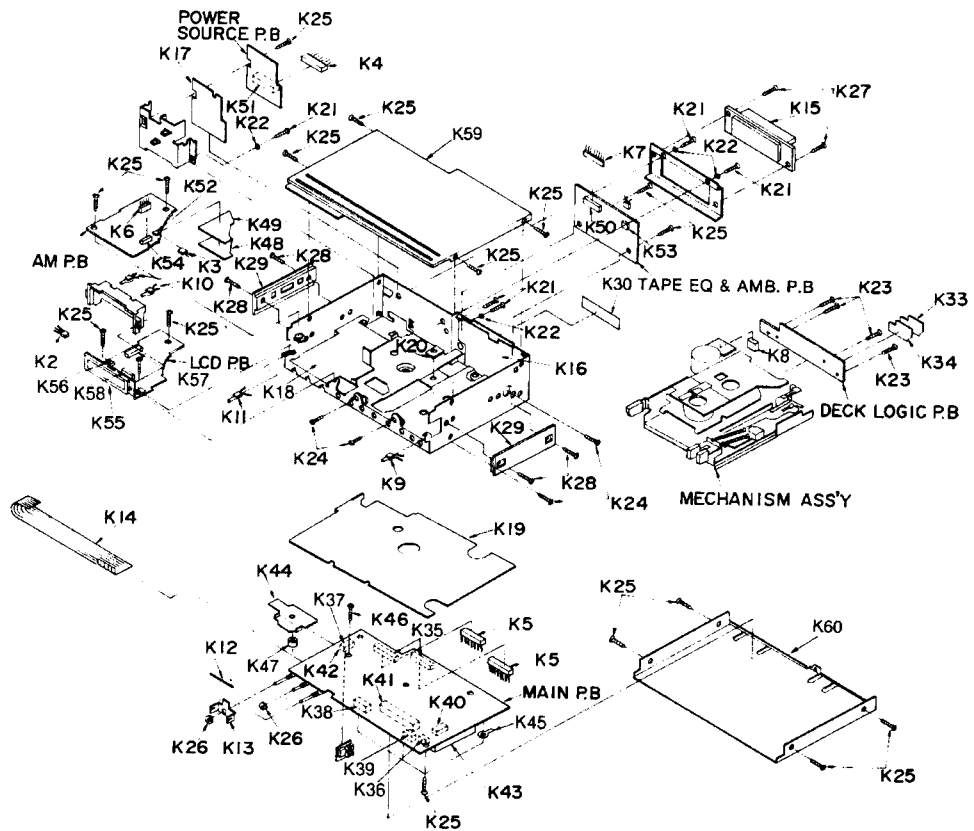
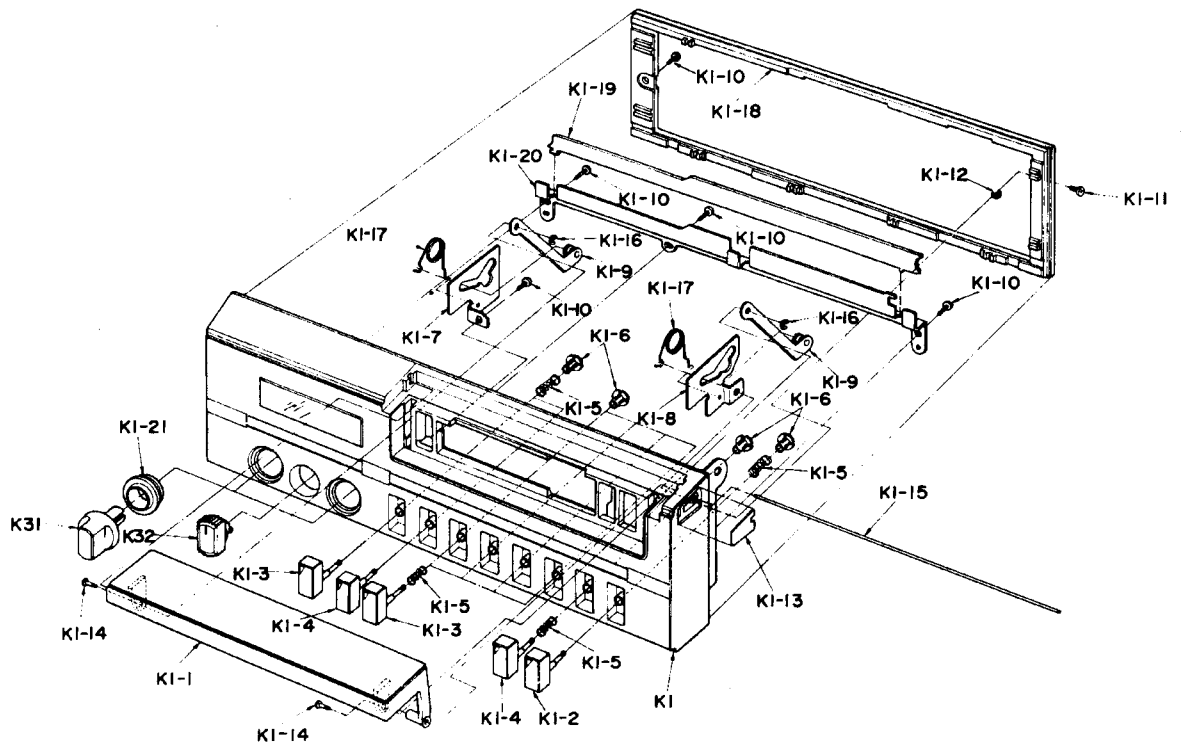
MECHANISM PARTS LOCATION



■ SPECIFICATIONS

Takeup Torque	30~55 gcm
Fast Forward Torque	35~70 gcm
Rewind Torque	35~70 gcm
Pressure of pinch roller	300~450 g
Wow and flutter	Less than 0.15% (WRMS)

CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
MECHANICAL PARTS			M 62	RFS302Z	Spring, Lock Release Plate	K 1-20	RUH6Y	Angle, Indicator
M 1	RFH6Z	Playback Head Ass'y	M 63	RFY247Z	Lock Release Plate	K 1-21	RHG3001Z	Rubber, Knob
M 2	RFB30Z	Main Belt	M 64	RFS301Z	Spring, Lock Release Plate	K 2	RWN1M1300AJH	Socket Ass'y, CN 108, 408
M 3	RFE109Z	Screw, Case Lifter etc. M'tg	M 65	RFS346Z	Spring, Head Panel Ass'y	K 3	RWN2M1300AJH	Socket Ass'y, CN 102, 302
M 4	RFD153Z	Case Lifter	M 70	MMX4H2WDA	Motor Ass'y	K 4	RWN3M1300AJH	Socket Ass'y, CN 106, 107, 606
M 5	RFE90Z	Screw, Pack Pressure Spring M'tg	M 71	RSE98Z	Key Off Plunger	K 5	RWN4M1300AJH	Socket Ass'y, CN 105, 505
M 6	RFX77Z	Spacer, Pack Pressure Spring	M 72	RFF19Z	Flywheel Ass'y	K 6	RWN5M1300AJH	Socket Ass'y, CN 104, 304, 404
M 7	RFS306Z	Spring, Pack Pressure	M 73	RFF18Z	Flywheel Ass'y	K 7	RWN6M1300AJH	Socket Ass'y, CN 502
M 8	RFD152Z	Cassette Case B	M 74	RFN85Z	Nylon Washer, Flywheel Ass'y	K 8	RWN7M1300AJH	Socket Ass'y (Tape, Motor)
M 9	RFS298Z	Tension Spring	M 75	RFT6Z	Circuit Board	K 9	RWN8M1300AJH	Socket/Lamp Ass'y (PL 4)
M 10	RFY239Z	Change Lever	M 76	RFN72Z	Washer, Circuit Board	K 10	RWN9M1300AJH	Socket/Lamp Ass'y (PL 1, 5)
M 11	XUC2FT	E Ring, Main Plate, etc. M'tg	M 77	RFE112Z	Screw, Transistor M'tg	K 11	RWN10M1300AJH	Socket/Lamp Ass'y (PL 2)
M 12	RFU19Z	Main Plate	M 78	RFE113Z	Screw, Motor Ass'y M'tg	K 12	RUS42Z	Spring, Volume
M 13	RFS296Z	Spring, Switch Operation Plate	M 79	RFE91Z	Screw, Key Off Plunger M'tg	K 13	RMD2056Z	Bracket
M 14	RFE110Z	Screw, Gear Plate A M'tg	M 80	RFS305Z	Spring, Switch Lever Arm	K 14	RJE161Z	Lead Wire
M 15	RFD150Z	Gear Plate A	M 81	RFY252Z	Switch Lever Arm	K 15	RJS0R1Z	Socket
M 16	RFQ40Z	Main Gear	M 82	RFS297Z	Reverse Spring, Change Plate	K 16	RMX248Z	Insulator
M 17	RFN87Z	Nylon Washer, FF/REW Gear	M 83	RFS308Z	Spring, Key Off Plate B	K 17	RMX249Z	Insulator
M 18	SMQ4830	Washer	M 84	RFY255Z	Key Off Plate B	K 18	RMX250Y	Insulator
M 19	RFS299Z	Spring, FF/REW Gear	M 85	RFY254Z	Key Off Plate A	K 19	RMX252Y	Insulator
M 20	RFY42Z	FF/REW Gear	M 86	RFX78Z	Spacer, Key Off	K 20	RMX256Z	Insulator
M 21	RFQ41Z	Reverse Gear	M 87	RFN88Z	Nylon Washer, Flywheel Ass'y	K 21	XSN3 + 4S	Screw, Bracket, Socket M'tg
M 22	RFX74Z	Spacer, Gear Plate	M 88	RFE114Z	E Ring, Flywheel Ass'y M'tg	K 22	XWA3B	Washer
M 23	RFY241Z	Reed Plate	M 89	RFE108Z	Screw, Motor Bracket M'tg	K 23	XTN2 + 4B	Screw, Circuit Board M'tg
M 24	SMQ482B	Washer, Reel Table	M 90	RFS304Z	Spring, Eject Lever	K 24	XTV26 + 5F	Screw, Deck M'tg
M 25	RFJ26Z	Reel Table	M 91	RFY251Z	Lever, Eject	K 25	XTV3 + 6BFN	Screw, Bracket, Circuit Board M'tg
M 26	RFN86Z	Nylon Washer, Reel Table	M 92	XUC3FT	E Ring, Eject Lever M'tg	K 26	XNS7D	Nut Volume Mute Int Cum
M 27	RFS309Z	Spring, Reel Table	M 93	XTN26 + 4H	Screw, Motor Bracket M'tg	K 27	RHE5047Z	Screw, Socket M'tg
M 28	RFS295Z	Spring, Pinch Roller Arm Ass'y	M 94	XYN26 + JS	Screw, Lever M'tg	K 28	RHE5048Z	Screw, Slider M'tg
M 29	XSN2 + 4	Screw, Playback Head-M'tg	M 95	RBC483Y	Button, Eject	K 29	RKC80Z	Slider
M 30	RFS293Z	Plate Spring, Playback Head	M 96	RBC482Y	Button, REW	K 30	RQT1180Y	Name Plate
M 31	XYN2 + 11F	Screw, Tape Guide M'tg	M 97	RBC482Z	Button, FF	K 31	RBN651Y	Knob, VOLUME, INT COM
M 32	RFN89Z	Washer, Tape Guide M'tg	M 98	RUB284Z	Lever, Eject	K 32	RYTM1100NHD	Mute Knob Ass'y
M 33	RFE107Z	Tape Guide				K 33	RMCM10Z	Shield Cover
M 34	RFY237Z	Pinch Roller Operation Plate Ass'y				K 34	RMX280Z	Insulator
M 35	RFU18Z	Head Plate Ass'y				K 35	RJP12G10Z	Plug, CN 105, 106
M 36	RFR12Z	Pinch Roller Arm (Right)				K 36	RJP2G4Y	Plug, CN 102, 108
M 37	RFN51Z	Washer				K 37	RJP3G1Z	Plug, CN 109
M 38	RFY242Z	Switch Lever Arm				K 38	RJP3G10Z	Plug, CN 107
M 39	RFY253Z	Lift Up Lever				K 39	RJP3G4Y	Plug, CN 101
M 40	RFS307Z	Reverse Spring, Eject						
M 41	RFX75Z	Spacer, Push Plate				K 40	RJP4G10Z	Plug, CN 104
M 42	RFY250Z	Push Plate				K 41	RJS23Q8Z	Plug, CN 103
M 43	RFX76Z	Spacer, Push Plate				K 42	RJS3M1Z	Plug, CN 109
M 44	XUC15FT	E Ring, Push Plate Spacer				K 43	RMC805Z	Shield
M 45	RFY238Z	Timing Plate				K 44	RMV188Z	Heat Sink
M 46	RFS294Z	Spring, Timing Plate				K 45	RJT1026Z	Terminal
M 47	RFY240Z	Rack Plate				K 46	XTB3 + 8BFZ	Screw, Heat Sink M'tg
M 48	RFQ22Z	Head Base Plate Roller				K 47	RHM168Z	Spacer, Heat Sink
M 49	RFR13Z	Pinch Roller Arm (Left)				K 48	RMC1026Z	Shield
M 50	RFY243Z	Pull Plate				K 49	RMX301Z	Insulator
M 51	RFE111Z	Screw, Lever Bracket, etc. M'tg				K 50	RJP10G9Y	Plug, CN 502
M 52	RFY249Z	Lock Sensor Push Plate				K 51	RJP15G10Z	Plug, CN 601
M 53	RFY245Z	Rewind Lever				K 52	RJP2G9Y	Plug, CN 302
M 54	RFS300Z	Spring, Rewind, FF Lever				K 53	RJP3G9Y	Plug, CN 501
M 55	RFY244Z	FF Lever				K 54	RJP7G10Z	Plug, CN 304
M 56	RFY246Z	Non-Lock Plate				K 55	RADAM834	Display Tube
M 58	RFT7Z	Circuit Board				K 56	RJP2G9Y	Plug (2P), CN 408
M 59	RFD151Z	Bracket, Lever				K 57	RJS22Q7Z	Socket, CN 403
M 60	RFS303Z	Spring, Lock Plate				K 58	RJS30Q5Z	Socket, CN 401
M 61	RFY248Z	FF/REW Rock Plate						
			K 1	RYPM1300AJHD	Front Panel Ass'y			
			K 1-1	RYQM1300AJHD	Cassette Cover Ass'y			
			K 1-2	RBC481Z	Button, AMB			
			K 1-3	RBC481Z1	Button, Preset, Band			
			K 1-4	RBC481Z2	Button, M/ME, Dolby, SENS			
			K 1-5	RDS3094Z	Spring, Preset Button			
			K 1-6	RHR475Y	Stopper, Button			
			K 1-7	RUL697Z	Bracket, Cassette Cover, Left			
			K 1-8	RUL698Z	Bracket, Cassette Cover, Right			
			K 1-9	RUL9004Z	Lever, Cassette Cover			
			K 1-10	XTN26 + 8B	Tapping Screw			
			K 1-11	XSN3 + 6S	Screw, Cassette Cover Bracket			
			K 1-12	XWA3B	Washer			
			K 1-13	RGX1367Z	Ornament			
			K 1-14	RHM164Z	Shaft, Cassette Cover			
			K 1-15	RDF828Z	Shaft, Cassette Cover			
			K 1-16	XUC12F	Stop Ring			
			K 1-17	RUS515Z	Spring, Cassette Cover			
			K 1-18	RHG8000Z	Rubber, Front Panel			
			K 1-19	RGE74Y	Panel, Indicator			

CABINET PARTS

GAD

A.M



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